APPLICATION

submitted by

THE STATE OF GEORGIA
DEPARTMENT OF COMMUNITY HEALTH
DIVISION OF MEDICAL ASSISTANCE

Roy E. Barnes, Governor
Russ Toal, Commissioner

to the

UNITED STATES DEPARTMENT
OF HEALTH AND HUMAN SERVICES
HEALTH CARE FINANCING ADMINISTRATION

FOR WAIVER OF CERTAIN REQUIREMENTS APPLICABLE TO THE MEDICAID PROGRAM UNDER SECTION 1115 OF THE SOCIAL SECURITY ACT, TO PROMOTE EARLY INTERVENTION AND TO CONDUCT RESEARCH AND EVALUATION REGARDING HIV/AIDS CARE IN THE STATE OF GEORGIA

October 30, 2000

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EXECUTIVE SUMMARY

The State of Georgia faces a severe and growing epidemic of HIV/AIDS. Seventh in the nation in the rate of recent AIDS diagnoses, Georgia is home to an estimated 30,000 individuals living with HIV infection.

What began in the early 1980s as a health crisis primarily among Atlanta's gay community has since spread to every corner of the State, leaving no major demographic group untouched. Today, the disease principally affects the poorest and most economically vulnerable segments of the State's population. In 2000, the individual newly diagnosed with HIV/AIDS in Georgia is likely to be African-American, lack health insurance, and have an annual income under $10,000.

In an effort to provide care and treatment to this increasingly low-income population, Georgia relies principally on two safety-net programs – Medicaid and the Ryan White CARE Act. While these programs provide vital services to thousands of Georgians with HIV, they fail to offer a means for effective medical or public health management of the epidemic.

In FY1999, Medicaid provided services to 3,783 persons having a primary or secondary diagnosis of HIV. Unfortunately, the Medicaid program is structurally incapable of ensuring a broad-based response to Georgia's epidemic, as evidenced by the relatively small portion of HIV-infected individuals covered by the program. Although combination antiretroviral therapy enables clinicians to prevent or delay their patients from becoming disabled, Medicaid largely withholds care from most people with HIV until these individuals become fully (and in many cases irreversibly) disabled.

The Ryan White CARE Act helps states and localities close gaps in HIV-related health care access, primarily through categorical grants. In 1999, 12,287 persons living with HIV availed themselves of medical and/or support services provided by the Ryan White program. By mid-2000, the AIDS Drug Assistance Program (funded in large part by Ryan White) provided HIV drugs to

3,299 people, and nine safety net clinics throughout Georgia received Ryan White support to provide basic medical care.

While Ryan White services often literally mean the difference between life and death for uninsured persons with HIV, the program cannot on its own (or in combination with Medicaid) close the gaping holes in the continuum of HIV care. Combination HIV therapy requires close, careful, and ongoing monitoring and supervision to be effective, yet Ryan White's categorical grants permit safety-net providers to offer the barest minimum of care to their patients.

Available evidence underscores the need to explore new, more effective ways to deliver essential care and services to low-income persons in Georgia at a pre-disability stage of HIV infection:

- While Ryan White offers vital HIV drugs to the uninsured, the typical recipient of Ryan White services in Georgia sees a doctor only between three and six times a year. Overstretched, categorically funded safety-net programs lack the financial capacity to provide optimal medical management of HIV disease.

- One in two persons with diagnosed HIV infection is not in care, and an estimated 8,000 individuals in Georgia are infected but do not know it. Categorical grants fail to offer providers any financial incentive to undertake aggressive case-finding or to pursue innovative strategies to promote timely knowledge of serostatus. For providers, new cases mean more work but no additional funding.

- Patchwork care leads to serious quality assurance problems. An estimated one-quarter of HIV-infected, low-income persons in Georgia who are in care and who qualify for combination antiviral therapy either receive no antiviral treatment or obtain a regimen that fails to adhere to federal treatment guidelines. The resulting regimens these patients receive are suboptimal, both in terms of the patients' own health and in light of a public health need to promote adherence to therapy in order to prevent the emergence of drug-resistant strains of HIV.

- Many parts of the State have no HIV care infrastructure to speak of. As a result, indigent patients must either forego care completely or travel several hours to obtain basic care.

In these circumstances, it is understandable that consumers, providers, and public health experts who were recently consulted for a statewide needs assessment overwhelmingly cited lack of health insurance as the primary impediment to decent medical care.

Consistent with Governor Roy Barnes' statewide initiative to provide medical coverage to all uninsured individuals, the State of Georgia seeks a waiver from the Medicaid Act to implement (in phases over 3-5 years) an innovative demonstration project to ensure that low-income persons with HIV infection have access to comprehensive medical services. Key elements of the proposed demonstration project include:

- Provision of a broad, but tailored, set of benefits to persons with HIV infection whose annual income is below 235% of the federal poverty level (FPL);
- Close, innovative collaboration with existing Ryan White CARE Act programs to maximize the quality and comprehensiveness of medical services available to people living with HIV;
- Limitation of the pool of approved providers under the demonstration project to a network of designated HIV Centers of Excellence chosen in large measure based on experience in providing high-quality HIV care and on sensitivity to the special needs of persons living with HIV;
- Implementation of extensive training and quality assurance measures to ensure optimal medical management of persons enrolled in the demonstration project; and
- Initiation of primary care case management activities to maximize treatment adherence among persons enrolled in the demonstration project.

Available data regarding the care of persons with HIV confirm that the demonstration project will:

- Improve the health and well-being of people living with HIV;
- Reduce and/or delay HIV-related hospitalization costs, the incidence of HIV-related opportunistic infections, and the intensive costs of terminal care;
- Enable HIV-positive working people to remain employed, with associated tax benefits to both the federal government and the State of Georgia; and

- Promote the integrity and sound fiscal management of Georgia's Medicaid program by realizing the above-described public health objectives without spending more federal money over the long run than would otherwise have been spent in absence of the requested waiver.

An economic model devised by PricewaterhouseCoopers reveals that Georgia's demonstration project will result in *diminished* Medicaid spending on the State's low-income persons with HIV. Five years after initiation of the project, combined Medicaid and demonstration project expenditures on this population will be $4.1 million (or 5%) less than Medicaid alone would have spent in the absence of the waiver. Significantly, PricewaterhouseCoopers estimates that these savings will grow, such that spending on this population under the demonstration project would after 10 years only be slightly more than one-half what Medicaid would have spent without a waiver. In 10 years' time, the Medicaid system will have saved $185.6 million by implementing the demonstration project proposed here.

Georgia respectfully submits that a waiver of various requirements under Section 1115 of the Social Security Act is justified to support the sound medical and financial management of the State's growing HIV epidemic.

GEORGIA'S APPLICATION AT A GLANCE

HIV/AIDS in Georgia

- ***Nearly 30,000 people are living with HIV in Georgia – approximately 10,000 with AIDS, 12,000 with diagnosed HIV (not AIDS), and 8,000 with undiagnosed HIV infection.***
- ***African-Americans account for roughly two-thirds of all living AIDS cases in Georgia and more than 80% of new AIDS cases and positive HIV test results.***
- ***The great majority (probably 75% or more) of people with HIV in Georgia have incomes under 235% FPL.***
- ***Although the Atlanta metropolitan region has been hardest hit by HIV/AIDS, the State faces a serious and growing epidemic in smaller cities and rural areas.***

Non-Surveillance Data Sources

- ***20% or more of people with HIV in Georgia have CD4 counts greater than 500. At least 40% of people with HIV – and a majority of ADAP enrollees – have CD4 counts between 200-500.***
- ***A substantial percentage of people with HIV who qualify for HAART under federal treatment guidelines – more than 1 in 5 participants in the Adult Spectrum of Disease Study – are receiving no antiretroviral therapy or substandard therapy.***
- ***Average length of hospital stay for Medicaid recipients on HAART (10.95) is roughly one-third that for HIV-positive Medicaid recipients as a whole (30.47). Annual hospitalization costs for HAART patients amount to $4,567.***
- ***Average cost for mental health and substance abuse services per HIV-positive Medicaid patient who used such services was $1,618 in FY99.***
- ***Average lab costs for an HIV-positive Medicaid patient who used lab services in FY99 was $392.***

- ***40% of HIV-positive patients at Grady Hospital's Infectious Disease Program – or approximately 1,600 – are uninsured.***

- ***Patients at the Grady IDP average 11 doctor visits per year.***

- ***The overwhelming majority of patients who receive care in Ryan White Title III clinics in Georgia have no third-party reimbursement for their medical services.***

<u>Safety-Net Infrastructure for HIV Care in Georgia</u>

- ***Low-income HIV-positive consumers, especially those in smaller cities and rural areas, express deep dissatisfaction with both the accessibility and quality of HIV-related services.***

- ***Both consumers and providers cite lack of health insurance as the major impediment to high-quality HIV medical care. According to available data, lack of health coverage is strongly correlated with the worst medical outcomes and with poorest access to effective HIV therapies.***

- ***HIV safety net providers depend primarily on categorical funding streams. These poorly funded care outlets are experiencing substantial increases in medical service demands, due to growing caseloads and the medical complexity of administering increasingly complicated HIV therapies.***

- ***According to consumers and providers, HIV care for low-income persons should be centralized as much as possible in order to reduce fragmentation and improve quality.***

- ***Georgia suffers from a severe shortage of HIV-related medical expertise in smaller cities and rural areas.***

- ***Grady IDC is the largest provider of HIV care in the State, serving approximately 4,000 patients (40% of whom are uninsured). Grady primarily serves patients who are symptomatic or have been diagnosed with AIDS.***

- ***In addition to the Grady IDC, the Ryan White Title I program in metro Atlanta funds primary care services at six outpatient clinics. These clinics largely serve persons with CD4 counts higher than 200.***

- ***Nine HIV clinics – all but two of which are located outside metro Atlanta – provide early intervention services to approximately 3,500 people with HIV throughout the State.***

- ***In an effort to close gaps in health care access, the State directs funding to HIV primary care centers in 17 of the State's 19 health districts.***

- ***Certain areas of the State have little or no HIV care infrastructure.***

<u>Safety-Net Payers for HIV Care in Georgia</u>

- ***Roughly one in three people with diagnosed HIV infection in Georgia – or approximately 6,600 individuals – have no health coverage. It is reasonable to assume that the vast majority of such uninsured individuals have incomes below 235% FPL.***

- ***Medicaid currently cares for approximately 4,000 persons with HIV/AIDS, or less than 20% of persons in Georgia diagnosed with HIV infection.***

- ***Due to eligibility restrictions, it is extremely difficult for adult males with HIV infection to obtain comprehensive Medicaid coverage prior to advanced stages of HIV disease. Consequently, the bulk of low-income HIV-positive persons who are not in the latter stages of AIDS must look to categorically-funded safety-net programs (e.g., Ryan White, ADAP) to meet their HIV care needs.***

- ***Approximately 3,300 persons with incomes under 300% FPL – all but a small percentage of them uninsured – obtain HIV medications through the State's AIDS Drug Assistance Program.***

- ***Although Medicare has historically played little role in paying for HIV care, its prominence is increasing as people with HIV live longer. Eight percent of ADAP recipients in Georgia and more than 1 in 5 Grady IDP patients are covered by Medicare. Medicare, however, does not cover most prescription drugs, the centerpiece of HIV care.***

- ***In an effort to close gaps in the patchwork system of HIV care in Georgia, the Ryan White CARE Act annually delivers several million dollars for HIV care services throughout the State. In addition to ADAP, Ryan White principally supports categorical grants to safety-net providers throughout Georgia.***

- ***Due in large measure to low rates of health coverage and poorly developed care infrastructure in underserved communities, national studies indicate that one-half of all persons with diagnosed HIV infection are not in regular care.***

<u>Proposed Demonstration Project</u>

Georgia proposes to phase in over 3-5 years a demonstration project to maximize health care access and improve health care outcomes for low-income persons with HIV. Key elements include:

- ***Eligibility (subject to enrollment caps) for HIV-infected individuals with incomes under 235% FPL;***
- ***Care provided by multi-discriplinary care teams at designated HIV Centers of Excellence;***
- ***Access to all medically necessary drugs through unique partnership with AIDS Drug Assistance Program;***
- ***Doctor visits, hospital benefit, and mental health and substance abuse services;***
- ***Rigorous clinic-based case management program to promote treatment adherence;***
- ***Extensive provider training and quality assurance measures to ensure that care provided under the demonstration project is in keeping with recommended treatment guidelines;***
- ***Thorough input from key stakeholders in the formation and implementation of demonstration project; and***
- ***Extensive evaluation to document project's success in meeting program objectives.***

<u>Anticipated Benefits of Proposed Demonstration Project</u>

- ***Overwhelming evidence demonstrates that Georgia's demonstration project will:***

- ***Increase rates of recommended antiretroviral therapeutic regimens among persons for whom such treatment is medically appropriate;***
- ***Enhance rates of treatment adherence among HIV-infected persons on antiretroviral therapy; and***
- ***Improve the quality of care provided to low-income persons living with HIV.***

- ***Five years after full enrollment of the target population, Georgia's program will have saved $4.1 million. After 10 years, savings are projected to grow to more than $185 million.***

INTRODUCTION

The Georgia Department of Community Health, Division of Medical Assistance (Georgia), respectfully submits this application to the Health Care Financing Administration pursuant to Section 1115 of the Social Security Act. Specifically, Georgia seeks a waiver from certain provisions of federal law in order to permit the State to implement the demonstration project outlined herein.

In seeking this waiver, Georgia seeks to promote the following objectives:

- Improve the health and well-being of people living with HIV;
- Reduce and/or delay HIV-related hospitalization costs, the incidence of HIV-related opportunistic infections, and the intensive costs of terminal care;
- Enable HIV-positive working people to remain employed, with associated tax benefits to both the federal government and the State of Georgia; and
- Promote the integrity and sound fiscal management of Georgia's Medicaid program by realizing the above-described public health objectives without spending more federal money over the long run than would otherwise have been spent in absence of the requested waiver.

Key elements of the proposed demonstration project include:

- Provision of a broad, but tailored, set of benefits to persons with HIV infection whose annual income is below 235% of the federal poverty level (FPL);
- Close, innovative collaboration with existing Ryan White CARE Act programs to maximize the quality and comprehensiveness of medical services available to people living with HIV;
- Limitation of the pool of approved providers under the demonstration project to a network of designated HIV Centers of Excellence chosen in large measure based on experience in providing high-quality HIV care and on sensitivity to the special needs of persons living with HIV;
- Implementation of extensive provider training and quality assurance measures to ensure optimal medical management of persons enrolled in the demonstration project; and
- Initiation of primary care case management activities to maximize treatment adherence among persons enrolled in the demonstration project.

Consistent with the research purposes of Section 1115 waivers, Georgia proposes to undertake extensive evaluation efforts to test the demonstration project against the following propositions:

- That expansion of comprehensive medical coverage to low-income HIV-infected persons who do not currently qualify for Medicaid will improve health care outcomes without imposing additional long-term costs to the federal government;
- That the preceding result may be obtained in rural areas and smaller cities, as well as in large urban areas;
- That limiting provider eligibility to HIV Centers of Excellence will improve health care outcomes more efficiently and effectively than allowing open eligibility to all providers;
- That designing an HIV care system based on close and careful coordination between the Medicaid and Ryan White CARE Act programs will improve health care outcomes without imposing additional long-term costs to the federal government; and
- That a client-centered primary care case management program, combined with extensive medical training and quality assurance measures, will improve health care outcomes and increase medication adherence without imposing additional long-term costs to the federal government.

To implement the proposed demonstration project, Georgia requests waiver authority with respect to the following provisions of the Social Security Act –

- § 1115(a)(2) – to extend Medicaid benefits to individuals whose income and resources exceed SSI income limits but who have incomes below 300% FPL and personal assets within delineated limits;
- § 1115(a)(2) – to regard expenditures for individuals receiving services through the demonstration project as federally matchable expenditures;
- § 1902(a)(10)(B) – to limit the amount, duration and scope of services accessible through the demonstration project, in order that the State may tailor a set of HIV services to the specific needs of the demonstration population; and
- § 1902(a)(23) – to limit the provider pool to providers and their staff whom the State (through a competitive RFP) determines to be appropriate for delivering services to participants of the demonstration project.

This application provides extensive information regarding the proposed demonstration project, the data on which the project is based, and the basis for Georgia's belief that this demonstration project will yield the above-described public health and economic benefits.

SECTION ONE AT A GLANCE: HIV/AIDS IN GEORGIA

- ***Nearly 30,000 people are living with HIV in Georgia – approximately 10,000 with AIDS, 12,000 with diagnosed HIV (not AIDS), and 8,000 with undiagnosed HIV infection.***
- ***African-Americans account for roughly two-thirds of all living AIDS cases in Georgia and more than 80% of new AIDS cases and positive HIV test results.***
- ***The great majority (probably 75% or more) of people with HIV in Georgia have incomes under 235% FPL.***
- ***Although the Atlanta metropolitan region has been hardest hit by HIV/AIDS, the State faces a serious and growing epidemic in smaller cities and rural areas.***

SECTION ONE: HIV/AIDS IN GEORGIA

Georgia is home to approximately 7.5 million people – 71.1% white, 26.9% black, 1.6% Hispanic, and 1.1% Asian/Pacific Islander. More than 900,000 Georgians have annual incomes under the federal poverty line ("FPL"), and one-third of all residents are under 200% FPL. Geographically, the State is subdivided into 159 counties and 19 health districts.

As this section reveals, Georgia is also home to a serious, and growing, HIV/AIDS epidemic. This section briefly profiles the epidemic in Georgia from the standpoint of official public health information systems.

AIDS in Georgia – Statewide

HIV is not reportable in Georgia. Thus, the AIDS case surveillance system serves as the State's primary means to track the epidemic.

By the end of 1999, Georgia had recorded 21,477 AIDS cases. At the beginning of calendar year 2000, 9,751 people in Georgia were living with full-blown AIDS. Men comprise 80% of all people living with AIDS, but women's share of new AIDS cases has increased steadily, from 4% in 1984 to 27% last year. For AIDS cases reported between July 1998 and June 1999, Georgia ranked seventh among the states in AIDS case rate per 100,000 population (with 1,635 new cases, for a rate of 21.4 per 100,000).

In recent years, AIDS in Georgia has become increasingly centered in the African-American population. Although African-Americans accounted for 37% of AIDS cases reported in 1987, they made up 81% of new AIDS cases in 1999. Among people living with AIDS at the end of 1999, 65% (6,314) were African-American, 31% (2,986) white, 2% (226) Latino, and less than 1% (20) belonged to other ethnic and racial groups. The AIDS case rate among blacks in Georgia (247.2 per

100,000) is roughly five times higher than for whites (53.3) and 2.5 times higher than for Hispanics (97.6).

Georgia has witnessed notable changes in the prominence of different exposure risks among its AIDS cases. Men who have sex with men (MSM) continue to represent not only the largest single group of new AIDS cases but also the largest category of living AIDS cases. Nevertheless, the percentage of MSM among new AIDS cases has sharply declined – from 58% in 1990 to 31% of new AIDS cases in 1999. Whereas new cases among injection drug users (IDUs) also declined during this period (from 18% to 13%), the percentage of cases attributed to heterosexual exposure doubled – from 9% in 1990 to 18% in 1999.[1]

AIDS cases in Georgia peaked in 1994, when 2,233 new cases were reported. Since 1994, the number of new AIDS cases has fallen by 66% -- to 768 in 1999. Between 1995 and 1999, the number of AIDS deaths in Georgia dropped by 69% -- from 1,490 to 456. These declines stem primarily from increasing application of highly active antiretroviral therapy (HAART), which slows disease progression in most patients.

AIDS in Georgia – Atlanta Region

Two counties in the Atlanta metropolitan area account for nearly 60% of Georgia's cumulative AIDS cases – Fulton County (with 9,740 cumulative cases, or 45% of the State's total) and Dekalb County (3,066; 14%). When neighboring suburban counties are taken into account, it is apparent that the Atlanta metropolitan region makes up about two-thirds of the State's cases. Fulton County's AIDS case rate is five times higher than the statewide average, and AIDS prevalence for the overall metropolitan region is double that reported for the State as a whole.

[1] Between 1995 and 1999, the percentage of AIDS case reports that were assigned no identified risk increased from 11% to 36%. Thus, both the relative distribution of recent case reports and the sharpness of the decline among MSM and IDUs should probably be interpreted with some caution.

Atlanta's predominance in Georgia's epidemic has declined slightly over time. Whereas the Atlanta region accounted for 73% of new AIDS cases in 1999, it was home to 61% of new cases reported in 1999.

As with the State as a whole, men make up more than 80% of living AIDS cases in the Atlanta area. Sixty percent of men living with AIDS in or around Atlanta were first exposed to HIV through sexual contact with another man. Overall, MSM make up 44% of new AIDS cases in the metro area, 50% of people living with AIDS, and more than one-half of all people believed to be living with HIV. According to the staff of the Atlanta regional program under Title I of the Ryan White CARE Act, heterosexual contact accounts for 22% of prevalent HIV infections in the metropolitan area (EMA),[2] whereas IDUs make up 18% of all people in the area living with HIV. Among HIV-infected patients at Grady Memorial Hospital's nationally recognized Infectious Disease Clinic, the number of persons who acquired HIV through heterosexual contact surpassed MSM for the first time in 1999.

While African-Americans account for 25% of the metropolitan Atlanta area's population, they account for 64% of people living with AIDS (compared to 34% for whites). Blacks in metropolitan Atlanta have an AIDS case rate that is four times higher than for whites and nearly three times as high as Hispanics.

As in other parts of the State (and in most parts of the nation), Atlanta has in recent years seen sharp declines in HIV-related illness and mortality. In 1999, however, Grady Hospital (the public hospital for Fulton and Dekalb counties) reported an increase in AIDS deaths for the first time since 1995.

[2] "EMA" refers to "eligible metropolitan area" under Title I of the Ryan White CARE Act. Such areas are eligible to receive Title I funding under the Act. Atlanta's EMA includes 20 counties.

AIDS in Georgia – Outside Atlanta

As the Atlanta region's percentage of Georgia's AIDS cases has declined somewhat in the 1990s, the contribution of rural areas has increased slightly – from 8% of the State's cases reported in 1990 to 11% of new AIDS cases in 1999. Health districts with smaller cities (e.g., Albany, Athens, Augusta, Columbus, Macon, and Savannah) account for the largest growth in AIDS cases in recent years. Whereas 19% of AIDS cases in 1990 lived in or around these smaller metropolitan areas, 28% of cases reported in 1999 reside in these districts.

Figure 1 is a map of Georgia that has been color-coded to reflect the varying levels of AIDS prevalence throughout the State. Outside the Atlanta area, the health districts with the highest number of cumulative cases are those that include Augusta (1,112); Savannah (948); Macon (805); Albany (750); and Columbus (705).

Figure 1

In terms of AIDS case rates (per 100,000 population) outside the Atlanta region, only Health District 9-1 (Savannah) exceeds the statewide case rate (by 5%), while Districts 6 (Augusta) and 8-2 approach the statewide average. Other areas of the State with notable concentration of cases include Health District 7-0 (Columbus; 73% of statewide average); District 9-3 (Brunswick, 61%); District 9-2 (Waycross, 60%); District 5-2 (Macon; 56%); and District 8-1 (Valdosta; 50%).

At the other extreme, Health District 5-1 (Dublin) has an AIDS case rate that amounts to 6% of the statewide average, and the rate in District 2 (Gainesville) is 13% of the statewide rate. Districts 1-1 (Rome) and 4 (LaGrange) have rates under half the statewide average, while Districts 1-2 (Dalton) and 10 (Athens) have AIDS case rates less than one-quarter of the statewide rate.

In addition to the severity of the epidemic, health districts also differ in the demographic profile of the disease. Whereas African-Americans make up a majority of AIDS cases in 13 of the State's 19 health districts, whites comprise a majority of cases in the districts around Rome (73%), Dalton (79%), Gainesville (76%), Cobb-Douglas (51%), Lawrenceville (67%), and Athens (58%).

HIV Infection in Georgia

Due to the lack of HIV infection reporting in Georgia, conclusions regarding the population of persons living with HIV (not AIDS) in the State must primarily be drawn from data sets other than public health surveillance.

Using different methodologies, the State of Georgia and the Centers for Disease Control and Prevention (CDC) have each estimated the total number of people living with HIV in Georgia. Each effort leads to a similar conclusion – that the number of HIV-infected people in the State (including those with AIDS) approaches 30,000.

In estimating the number of HIV-infected residents in the State, Georgia epidemiologists began with the proposition that the State has historically represented roughly 3% of the national epidemic. In light of national estimates that approximately 900,000 persons in the U.S. are infected

with HIV,[3] the State concluded in September 1998 that 27,179 persons in Georgia were living with HIV infection at the time, including more than 19,000 with HIV/not-AIDS. As the number of persons infected each year is believed by experts substantially to exceed AIDS-related deaths, it is reasonable to assume that the number of persons living with HIV/AIDS in Georgia has increased to 30,000 since the previous estimate was first derived nearly two years ago.

In a separate effort to assist state and local care-related planning activities under the Ryan White CARE Act, the CDC undertook earlier this year to estimate the number of people with HIV in each of the states and territories.[4] In Georgia, the CDC estimates that, in addition to roughly 10,000 living AIDS cases,[5] Georgia has approximately 12,000 persons who have been confidentially diagnosed with HIV. This figure excludes HIV-positive persons who have only been tested anonymously,[6] as well as infected individuals who have yet to be diagnosed. If national estimates of the ratio of tested to untested persons with HIV are applied to Georgia, it appears that approximately 29,333 persons in the State are currently living with HIV or AIDS (including about 8,000 persons who have yet to be tested).[7]

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[3] For several years, CDC has officially estimated that 650,000 to 900,000 persons in the U.S. are infected with HIV. With the passage of time, the accumulation of additional data, and the use of sophisticated back-calculation, CDC has revised its estimated range of HIV-infected persons to between 800,000-900,000.

[4] This effort combined back-calculation of AIDS cases with more than a decade of experience in 25 states with longstanding HIV reporting systems. (J. Karon, personal communication.)

[5] As noted earlier, there were 9,751 persons living with AIDS at the end of 1999. For purposes of these calculations, Georgia has adopted the conservative estimate for mid-2000 of 10,000 living AIDS cases.

[6] A notable percentage of persons who test positive in Georgia have historically been tested anonymously. While 38% of all tests in Fulton County in 1998 were anonymous (as opposed to confidential), the percentage of persons statewide choosing to be tested confidentially has increased steadily in recent years. In 1999, only 13% of persons tested in publicly funded clinics chose to be tested anonymously. MSM are disproportionately represented among anonymous testers.

[7] In calculating the total number of people living with HIV in Georgia, it was necessary to devise a multiplier to account for persons with undiagnosed infection. Of the 800,000-900,000 persons estimated by CDC to be living with HIV infection, CDC believes that 175,000-275,000 do not know they are infected. From these figures, Georgia devised a multiplier based on these national data to estimate the number of persons with undiagnosed HIV infection. If the higher estimate of total HIV-infected population is compared with the mid-point of CDC's estimates of untested positive individuals, it appears that there are three times as many persons with diagnosed HIV infection as undiagnosed

As with HIV prevalence, there is only limited information regarding new infections and new HIV diagnoses. Testing data in Georgia are primarily restricted to publicly funded counseling and testing sites.[8] Although limited, such data provide important insights into the characteristics of persons newly diagnosed with HIV.

It is evident, for example, that the person in Georgia who tests positive in 2000 is likely to be low-income and uninsured. During the first four and one-half months of 2000, for example, 64% of persons testing positive in Georgia's publicly funded test sites said they were uninsured, while 19% had public insurance. The HIV Cost and Services Utilization Study (HCSUS) – a national survey of health utilization patterns among HIV-infected persons in care – found that 80% of people living with HIV in the South had an annual income below 300% FPL[9] and that a majority (52%) made under $10,000 a year.[10] Serosurveys of Atlanta's homeless population in 1998 found HIV infection rates ranging from 8.7% to 10%.

Positive rates for persons testing in public test sites have remained relatively constant in recent years – between 2% and 2.5%. Although MSM and IDUs accounted for only 9% of all tests administered in public sites in Georgia in 1998, they contributed 38% of all positive results. The seropositivity rate for MSM (12.6%) in public test sites is the highest reported for any of the principal risk groups (although the relatively small number of MSM who also inject drugs have an infection rate exceeding 20%).

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disease. If 22,000 persons are currently living with HIV (10,000 diagnosed AIDS cases plus 12,000 persons living with HIV/not-AIDS), Georgia estimates that 7,333 persons with HIV infection have yet to be diagnosed, rendering a final estimate of the total number of people with HIV (diagnosed and undiagnosed) of 29,933.

[8] Nationally, publicly funded counseling and testing sites account for approximately one in three persons who test positive. Most people who test positive do so in health care settings, such as emergency rooms, physician offices, or acute-care hospitals.

[9] Among participants in HIV safety net programs in Georgia, roughly 5% have incomes between 235-300% FPL. Extrapolating from this figure, Georgia estimates that approximately 75% of its HIV-infected population as a whole have incomes below 235% FPL.

[10] For a single individual, 300% FPL equals $2,088 per month, or $25,056 per year.

While blacks make up slightly more than half of all persons tested in recent years in public test sites, they have consistently accounted for more than 80% of all positive test results. During the first four and one-half months of 2000, African-Americans (both men and women) contributed 86% of all positive test results in public sites. African-American males accounted for 78% of all positive test results in 1998, testing positive at a rate almost three times higher than white men. In 1998, five African-American positives were identified for every one white individual who tested positive in a public test site. Although women overall test positive much less frequently than men, 2.1% of African-American women tested positive in 1998.

SECTION TWO AT A GLANCE: NON-SURVEILLANCE DATA SOURCES

- ***20% or more of people with HIV in Georgia have CD4 counts greater than 500. At least 40% of people with HIV – and a majority of ADAP enrollees – have CD4 counts between 200-500.***
- ***A substantial percentage of people with HIV who qualify for HAART under federal treatment guidelines – more than 1 in 5 participants in the Adult Spectrum of Disease Study – are receiving no antiretroviral therapy or substandard therapy.***
- ***Average length of hospital stay for Medicaid recipients on HAART (10.95) is roughly one-third that for HIV-positive Medicaid recipients as a whole (30.47). Annual hospitalization costs for HAART patients amount to $4,567.***
- ***Average cost for mental health and substance abuse services per HIV-positive Medicaid patient who used such services was $1,618 in FY99.***
- ***Average lab costs for an HIV-positive Medicaid patient who used lab services in FY99 was $392.***
- ***40% of HIV-positive patients at Grady Hospital's Infectious Disease Program – or approximately 1,600 – are uninsured.***
- ***Patients at the Grady IDP average 11 doctor visits per year.***
- ***The overwhelming majority of patients who receive care in Ryan White Title III clinics in Georgia have no third-party reimbursement for their medical services.***

SECTION TWO: NON-SURVEILLANCE DATA SOURCES ON HIV/AIDS IN GEORGIA

To obtain additional information pertinent to the development of its demonstration project, Georgia examined additional data sources regarding HIV/AIDS in the State. These non-surveillance data sets include:

- Information routinely collected on enrollees in Georgia's AIDS Drug Assistance Program (ADAP);
- Medicaid data relating to covered services provided to persons with a primary or secondary diagnosis of HIV;
- Standard data compiled on recipients of health services under Titles I and II of the Ryan White CARE Act[11];
- Information collected by the Grady Infectious Disease Clinic;
- Basic information provided by Ryan White Title III programs12; and
- Results from the Atlanta site of the CDC's Adult Spectrum of Disease (ASD) survey.

With the exception of ASD, each of the above-noted data sources also plays a key role in the HIV care infrastructure in Georgia. The substantive components of each of these programs, as well as the many ways these programs relate to one another in the care and support of people living with HIV/AIDS, are described below in Section III. This section discusses the information derived from these programs that has helped inform the development of the proposed demonstration project.

[11] Title I of the Ryan White CARE Act provides federal funding to eligible metropolitan areas (EMAs) to deliver care and support services to persons and families living with HIV. Title II of the CARE Act provides federal funding to states to provide (a) care and support services to persons and families living with HIV, and (b) drugs (through ADAP) to HIV-infected persons who have no other means to obtain them.

[12] Title III of the Ryan White CARE Act provides direct funding to health centers to deliver early intervention services, including primary care, outreach, and HIV counseling and testing.

As explained below, no single data source provides a fully representative snapshot of the epidemic. Taken together, however, the non-surveillance data sources on which Georgia has relied in developing its demonstration project provide extensive, important information regarding the characteristics and experiences of people with HIV in Georgia.

ADAP

As of mid-2000, the Georgia ADAP program provided HIV-related medications to 3,299 people living with HIV. Of this number, 1,309 enrollees had been added to the program since the beginning of 2000.

ADAP recipients do not reflect the broader population of persons with diagnosed HIV infection. State regulations limit the program to persons with CD4 counts under 500 cells per cubic millimeter,[13] thereby excluding persons with slowly progressing HIV disease or those at an earlier stage of infection. In addition, a comparatively smaller percentage of persons with advanced disease are served by ADAP than may exist in the general HIV-positive population, as persons with serious HIV-related illness are more likely to be eligible to receive drugs and other services under Medicaid and/or Medicare.

Nevertheless, the ADAP database sheds important light on issues pertinent to Georgia's proposed demonstration project, as the program principally serves the primary target population for the proposed demonstration project – i.e., low-income persons who are not eligible for Medicaid due to their failure to satisfy eligibility requirements related to income and/or disability.

To become eligible for ADAP, one must have an income under 300% FPL. More than 95% of ADAP recipients in Georgia have monthly incomes under $1500, and more than three-quarters

[13] CD4+ are "helper" cells that play a pivotal role in the body's immune system, and their concentration in the blood of an HIV-infected person is a critical marker of the status of the person's immune functions (and of the associated risk of HIV-related morbidity and mortality). For purposes of brevity, this application refers to CD4+ cells as CD4 cells and omits the measurement standard (cells per cubic millimeter) when referring to CD4 counts.

make less than $1000 each month. More than one-third of ADAP enrollees have incomes under $500 per month, and nearly one in four (24.48%) reports no income whatsoever.

Forty percent of ADAP recipients have CD4 counts under 200, while a majority has counts between 200-500 CD4. Although the program excludes entry by persons with CD4 counts greater than 500, approximately 8% of enrollees fall within this category. (According to program staff, this number represents persons who entered the program with CD4 counts below 500 but whose immune systems have responded well to highly-active antiretroviral therapy (HAART)).

Ninety percent of ADAP enrollees in Georgia have no health insurance, while 8% depend on Medicare (which does not cover prescription drugs). In 1999, 55.9% of ADAP enrollees were African-American, 40.5% were white, and slightly more than 3% were Latino. More than three-quarters of ADAP recipients are between ages 30-50.

Eighty-five percent of ADAP recipients in Georgia are currently on HAART. Average monthly cost to the program per recipient is approximately $700.

(A summary of calendar year 1999 data for the ADAP program is attached as Appendix A.)

Medicaid

More than one in seven people in Georgia (or 1.2 million Georgia residents) look to Medicaid for their health care. In FY1999, 3,783 persons – 74% of whom were African-American – received medical services through the Medicaid program for which a primary or secondary diagnosis of HIV infection was recorded.

Although the Medicaid data system provides invaluable information regarding HIV-related cost and utilization, it does not capture a representative sample of people in Georgia living with HIV. Due to current eligibility criteria, the program is sharply skewed towards persons with extremely low incomes and with advanced HIV disease. In FY99, for example, 73% of HIV-infected persons who received reimbursed Medicaid services became eligible for the program

through receipt of Supplemental Security Income (SSI). SSI is a form of federal assistance requiring that a recipient be fully disabled under rules promulgated by the Social Security Administration and meet stringent income and resource limits.

Whereas women and children have other avenues through which to gain admission to the program (through TANF and other measures specifically designed to provide health coverage to pregnant women and children), HIV-infected adult males must almost always look to SSI. Accordingly, males are disproportionately under-represented under Georgia's HIV-infected Medicaid population. Whereas men account for about 80% of Georgia's AIDS cases, they make up only 53% of identified HIV-positive Medicaid recipients.

During FY99, Georgia's Medicaid program spent $15,041,459 on physician and professional service fees for services to persons diagnosed with HIV, for an average annual cost per recipient of $3,976.

In FY99, Medicaid spent $12,852,515 on HIV-related drugs.[14] Of Medicaid recipients with an HIV diagnosis in FY99, 2,336 (or 62%) took some form of antiviral medication. Thirty-eight (38) percent of HIV-positive Medicaid recipients (1,466) were on HAAR T (i.e., three or more approved antiviral drugs), and an additional 868 (23%) took one or two antivirals.

During FY99, there were 4,760 discrete inpatient admissions of Medicaid recipients with HIV, resulting in total Medicaid outlays (including drug, diagnostic, and other costs associated with hospitalization episode) of $70,870,356. Average length of stay for Medicaid recipients with HIV was 30.47 days, with an average total cost per stay of $14,889.

Hospitalization costs in FY99 for persons with HIV infection varied substantially, depending on whether the patient received antiviral therapy. Four hundred eight-seven (487) Medicaid

[14] HIV-related drugs are the 43 drugs that currently appear on Georgia's ADAP formulary. The formulary currently includes all approved HIV antiviral drugs, standard compounds for the prevention or treatment of opportunistic infections, and drugs to manage side effects of HIV-related therapies.

recipients on HAART accounted for 956 hospitalization admissions that year, or 1.96 admissions per recipient. Average length of stay for hospital patients on HAART was 10.95 days, with an average cost per stay of $7,003. Average length of stay for patients on a non-HAART antiviral regimen (one or two drugs) was similarly briefer (ALOS = 9.79 days) and less costly ($6,682 per stay) than the average.

Hospitalization costs per Medicaid HAART patients in FY99 were $4,567. For the 868 Medicaid recipients on a non-HAART regimen, hospitalization costs per person were slightly higher ($4,619). (While Medicaid recipients on a non-HAART regimen had somewhat shorter length of stays than their counterparts on HAART, they were more likely than HAART patients to be hospitalized.)

In FY99, 369 HIV-positive Medicaid recipients received mental health and substance abuse services through the program. Total cost of these services to the 369 persons with HIV who used these services was approximately $597,000, or $1,618 per person per year (or $135 per person per month).

During the same year, 2,701 persons with HIV had at least one laboratory test paid for by Medicaid. In FY99, Medicaid expended $1,060,000 on such lab tests, for a cost per Medicaid-eligible who used these services of $392 per year (or $33 per month).

HIV-related Medicaid expenditures cannot be correlated with patients' CD4 count, as such information is not collected by the program.

(A summary of FY1999 HIV-related data from the Georgia Medicaid program is attached as Appendix B.)

Ryan White Titles I and II

To help the State prepare this application, the Title I staff of the Fulton County Commission collaborated with the State Department of Human Resources to develop a statistical overview of the

entire State's experience with Ryan White Titles I and II. By merging the standard data routinely collected by Titles I and II, the State obtained an unduplicated count of clients under the formula-driven components of the Ryan White CARE Act.

In calendar year 1999, 12,287 persons in Georgia received services under Titles I and/or II. Nearly 60% (59.7%) of these clients were between ages 30-44; 70.7% were males; and 68.7% were African-American. Heterosexual contact was the leading exposure route for Ryan White recipients (40.1%), followed by sexual contact among men (32.5%).

Ninety-two percent of Ryan White recipients in 1999 had incomes under 300% FPL, and 8% were homeless. Roughly 50% of Ryan White clients have no health insurance. One in 10 has private insurance, 29.1% rely on Medicaid, and 10.8% depend on other public payers.

One in two Ryan White clients in Georgia looks to public community health centers as his or her primary source of medical care. The emergency room is the second most prominent source of care, cited by 15% of Ryan White recipients.

Ryan White recipients average 2.97 medical visits per year.[15] Less frequently used services include dental care (an average of 0.34 visits per year), mental health services (0.4 per year), and substance abuse services (0.57 per year).

Approximately one in five (19.6%) Ryan White recipients in Georgia had CD4 counts greater than 500 in 1999. Roughly one in three (32.6%) reported CD4 counts between 200-499, 30.8% had a CD4 count under 200, and information was missing for the remainder.

(A summary of unduplicated 1999 data from Titles I and II is attached as Appendix C.)

[15] As approximately one-half of Ryan White recipients have some form of health coverage, it is unclear whether otherwise-reimbursed physician visits are included in the total number of visits for these patients. If insured patients are excluded from the analysis, one would find that the average uninsured Ryan White recipient had, at most, fewer than six physician visits per year.

Grady Infectious Disease Clinic

As explained more fully in Section III, Grady Memorial Hospital's Infectious Disease Clinic (IDC) serves as the cornerstone of the HIV care infrastructure in Fulton-Dekalb area, the epicenter of Georgia's epidemic. Grady currently cares for approximately 4,000 people with HIV and collects extensive data on its patient population.

Grady's patients are not representative of the statewide population of people living with HIV. Grady's database does not fully reflect the experiences of persons living outside Atlanta (especially in rural areas), as 89% of Grady's patients reside in two urban counties – Fulton and Dekalb.

In addition, as Section III below describes, the Ryan White Title I planning council (which provides more than $6 million annually to support HIV medical services at Grady) has adopted a triage approach to care services, whereby persons with CD4 counts under 200 are directed to Grady while those with higher counts are referred to other care providers. Accordingly, Grady's patient population is skewed toward persons with advanced HIV disease. Whereas people with diagnosed HIV/not-AIDS outnumber people living with AIDS in Georgia, 65.4% of Grady patients have full-blown AIDS. The average CD4 count for patients entering the Grady clinic is 76, indicating that the typical new patient at the IDC is already in an extremely advanced stage of disease and at serious risk of HIV-related morbidity and mortality.

Thirty-nine percent of Grady's patients are uninsured, 36% depend on Medicaid, 22% have Medicare, and less than 3% are privately ensured. Grady patients average 11 doctor visits per year. The IDC saw a 32% increase in pharmacy visits between 1998 and 1999 – from 12,874 to 16,933.

More than three-quarters of Grady's patients are male. The steady historic growth in the percentage of female patients has plateaued over the last three years at approximately 24%. More than 70% of Grady IDC patients are African-American, and last year the number of persons

exposed to HIV through heterosexual intercourse surpassed MSM for the first time as the leading exposure route for Grady patients.

(A data summary from the Grady IDC program is attached as Appendix D.)

Ryan White Title III

Title III of the Ryan White CARE Act provides direct funding to nine early intervention clinics in Georgia. Collectively, these clinics serve regions areas that comprise slightly less than one-half of Georgia's counties. Seven of the nine clinics – including the two largest – are located outside the metropolitan Atlanta area.

Consultants who assisted Georgia in the development of the demonstration project met with representatives of each of these Title III clinics. Each clinic was asked to provide basic information regarding number of clients served and the prominence of respective forms of third-party payment.

Altogether, Title III clinics care for approximately 3,500 people with HIV. Approximately 1,900 patients in these clinics have no form of health coverage and look primarily to ADAP for HIV-related medications. Roughly 1,150 are covered by Medicaid, with approximately one-half of these being dually eligible for Medicare.

Adult Spectrum of Disease Survey

The CDC-sponsored Adult Spectrum of Disease survey monitors the health care experience of people with diagnosed HIV/AIDS. Information on such patients is gleaned through retrospective chart reviews, which are undertaken every six months, at clinics or private physicians' offices where HIV care is provided. Persons for whom there is no record of contact with the participating health care provider during the prior 24 months are considered "lost to follow-up" and dropped from the study cohort.

One of the sites for ASD is the AIDS Research Consortium of Atlanta (ARCA), which has participated in the survey since 1990. ARCA monitors patients at the Grady IDP (49% of active study participants), the local Veterans Administration medical facility (11%), and more than a dozen private physicians' offices (40%). Nearly 9,000 patients have been enrolled in Atlanta since the beginning of the study, and 2,036 were being actively followed as of May 2000.

In many ways, ASD is the most diverse and representative database that exists on people with HIV in Georgia. The ASD cohort in Atlanta reflects the care-related experiences of an exceptionally diverse group of HIV-infected persons across a spectrum of health care settings (both public and private). It may not, however, represent the experiences of persons who do not receive their health care in Atlanta. In addition, because ASD researchers work in established care sites, study results may not be representative of care-related experiences of patients with less experienced providers.

Sixty-five percent of ASD patients are African-American, 31% are white, and 3% are Hispanic. Nearly half (47%) are gay or bisexual, 12% are injection drug users, and 9% were exposed to HIV through heterosexual contact. As the study only recently began collecting sociodemographic information (e.g., income, payer source), conclusions regarding the prevalence of such variables in the study cohort are not yet feasible. Likewise, while ASD detects certain kinds of service utilization (such as use of medications), it does not track the costs of providing care to people with HIV/AIDS.

Of patients currently being followed by ARCA, 32% have experienced an AIDS-defining illness, and 36% have at least once had their CD4 count fall below 200. Almost one in three (32%) has never had AIDS. Approximately one-third of study participants currently have CD4 counts under 200 – 13.8% of participants are under 50 CD4, and 17.6% are under 100. The largest bloc of

participants (42.3%) has CD4 counts between 200 and 500. Roughly one in five (20.4%) have CD4 counts greater than 500.

Among ASD patients who met federal guidelines for HAART during the 24 months prior to May 2000, 60.2% were on a three-drug antiviral combination, 16.1% were on a four-drug regimen, 2% were taking more than four antiviral compounds, 15.7% were taking one or two antivirals, and 6% were on no antiviral medication. Of the 1,819 ASD patients prescribed HAART during the 24-month period, 98.3% had a regimen containing at least one nucleoside analogue, 32.4% had a regimen containing at least one non-nucleoside reverse transcriptase inhibitor, and 67% were prescribed a regimen including at least one protease inhibitor.

Among patients followed through ASD during the same 24-month period, 20 persons with fewer than 200 CD4 (~3%) were not taking prophylaxis against *pneumocystis carinii* pneumonia (PCP). Ninety percent of patients with CD4 counts between 200-299 received a PCP drug, and 63% between 300-499 were on some PCP medication.

Relying on periodic chart review, ASD is not able to distinguish between persons who die and those who simply no longer obtain care at one of the study sites. Accordingly, ASD does not routinely collect mortality data. The study has, however, observed steep declines in the incidence of HIV-related opportunistic infections in recent years, beginning in 1992.

(A recent summary of data from the Atlanta site of the Adult Spectrum of Disease Survey is attached as Appendix E.)

SECTION THREE AT A GLANCE: "SAFETY NET" INFRASTRUCTURE FOR HIV CARE

- ***Low-income HIV-positive consumers, especially those in smaller cities and rural areas, express deep dissatisfaction with both the accessibility and quality of HIV-related services.***

- ***Both consumers and providers cite lack of health insurance as the major impediment to high-quality HIV medical care. According to available data, lack of health coverage is strongly correlated with the worst medical outcomes and with poorest access to effective HIV therapies.***

- ***HIV safety net providers depend primarily on categorical funding streams. These poorly funded care outlets are experiencing substantial increases in medical service demands, due to growing caseloads and the medical complexity of administering increasingly complicated HIV therapies.***

- ***According to consumers and providers, HIV care for low-income persons should be centralized as much as possible in order to reduce fragmentation and improve quality.***

- ***Georgia suffers from a severe shortage of HIV-related medical expertise in smaller cities and rural areas.***

- ***Grady IDC is the largest provider of HIV care in the State, serving approximately 4,000 patients (40% of whom are uninsured). Grady primarily serves patients who are symptomatic or have been diagnosed with AIDS.***

- ***In addition to the Grady IDC, the Ryan White Title I program in metro Atlanta funds primary care services at six outpatient clinics. These clinics largely serve persons with CD4 counts higher than 200.***

- ***Nine HIV clinics – all but two of which are located outside metro Atlanta – provide early intervention services to approximately 3,500 people with HIV throughout the State.***

- ***In an effort to close gaps in health care access, the State directs funding to HIV primary care centers in 17 of the State's 19 health districts.***

- ***Certain areas of the State have little or no HIV care infrastructure.***

SECTION THREE: "SAFETY NET" INFRASTRUCTURE FOR HIV CARE IN GEORGIA

This section provides background information on the care infrastructure for low-income persons with HIV/AIDS. In Georgia, as in most other parts of the country, there is a sharp division between "safety net" providers (i.e., those who care for the indigent) and providers who serve a more affluent, privately insured patient population. This section concerns itself solely with the former group.

Each of the 19 health districts in Georgia (see Appendix I) has recently experienced increases in the number of HIV-positive persons entering their service systems. Escalating caseloads have placed growing demands on already-overstretched safety net programs.

Earlier this year, academic researchers from Emory and Virginia Commonwealth Universities published the results of a statewide needs assessment commissioned by the State Division of Public Health. (A copy of the needs assessment is submitted with this application.) The project found widespread dissatisfaction among consumers, providers, and opinion leaders in the quality and accessibility of care for low-income people with HIV. People with HIV surveyed in connection with the needs assessment reported that they have difficulty obtaining predictable primary care and that they are generally dissatisfied with the quality of services they receive. Consumers especially criticized the disjointed, fragmented nature of HIV care services, complaining that they must often go to several different locations to satisfy their medical and service needs. According to the researchers' report, the need for centralization of care services for indigent patients is apparent.

Shortfalls in both the quantity and quality of services were especially evident in rural areas and smaller cities. Informants cited the relative lack of HIV-related medical knowledge in many

parts of Georgia, which in turn often forces patients to travel long distances to obtain appropriate care.

According to consumers and providers who provided input to the needs assessment, lack of health insurance is the principal barrier to obtaining high-quality HIV care. As researchers reported, "As drug therapies become increasingly sophisticated, disparities in access to needed medications are more obvious and should be directly addressed." The perceptions of consumers and providers are confirmed by the national HIV Care and Services Utilization Survey (HCSUS),[16] which found that lack of insurance was correlated with the poorest health care outcomes and the most restricted access to vital HIV therapies. HCSUS researchers found that patients in the South were substantially more likely than persons in other regions to have had fewer than two outpatient visits during the prior six months. HIV-infected patients in the South who were eligible (under current treatment guidelines issued by the U.S. Public Health Service) for either HAART or PCP prophylaxis were far more likely not to have received this therapy than their counterparts in other parts of the U.S.

Atlanta Region – Grady Infectious Disease Clinic

The Grady IDC is the largest provider of HIV care in the State. With approximately 4,000 HIV-positive patients, Grady provides care to one in four ADAP recipients and to nearly 20% of the State's entire population of persons diagnosed with HIV/AIDS, and the facility accounts for 30% of HIV-related outpatient expenditures by the Georgia Medicaid program. The public hospital with which the IDC is affiliated – Grady Memorial Hospital in Atlanta – accounts for 50% of Medicaid inpatient spending on HIV care and for 40% of HIV-related inpatient units of service compensated by the Medicaid program.

[16] Commissioned by the United States government and overseen by the highly respected RAND Corporation, HCSUS is the most comprehensive survey ever undertaken of HIV-infected persons in medical care in the U.S. HCSUS researchers surveyed care settings throughout the U.S., including the Southern region. Published reports from HCSUS are attached as Appendix F.

As a public entity intended to serve the citizens of Fulton and Dekalb counties, Grady primarily serves these core counties of the Atlanta metropolitan area, although 11% of Grady's patients reside outside Fulton and Dekalb counties. Due to the triage system of care adopted by the Atlanta Ryan White planning process – whereby only patients who are symptomatic or who have fewer than 200 CD4 are referred to Grady – the Grady IDC tends to care for a far sicker population than most other HIV providers in the State.[17]

The IDC is housed in a five-story building on Ponce de Leon Avenue, off-site from the main Grady campus. The IDC unites under one roof a broad range of medical specialty, health and support programs. In addition to its main adult clinic, Grady has specialized clinics for women and families, teens, and the homeless. The Grady IDC has one of the nation's largest HIV oral health centers, and it also operates a mental health unit, various sub-specialty clinics, and a food program. Where appropriate, Grady facilitates its patients' participation in clinical trials. The IDC also provides space on-site for non-Grady workers, such as Medicaid eligibility specialists, Legal Aid lawyers, and community-based case managers.

The Grady IDC receives approximately 50% of the EMA's Ryan White Title I award -- $6.5 million in the most recent year. In addition to its Title I allocation, the Grady IDP also receives reimbursement for covered outpatient services from public insurance programs. More than one-third of its patients (35.8%) receive Medicaid, while 22.3% are covered by Medicare. Less than three percent of Grady's HIV patients (2.6%) are privately insured.

Other than the underwriting of its facility, the Grady IDP receives no direct subsidy from the Fulton-Dekalb Hospital Authority. (On the contrary, the larger Grady system annually assesses the IDC an amount for depreciation of clinic facilities.) Where hospitalization is needed, IDC

[17] As noted earlier, entering CD4 count for IDP patients is 76.

doctors are able to admit their patients to Grady Memorial, a disproportionate-share hospital that covers inpatient costs for persons who are otherwise unable to pay.

In addition, Grady Memorial operates an extensive pharmacy that covers patients of the IDC. Accordingly, the IDC provides drugs free of charge to a substantial portion of its patients, although the number of IDC patients on ADAP has increased in recent years. Pursuant to a contract with the State Division of Public Health, Grady, which benefits from favorable Public Health Service prices for pharmaceutical products, is currently the sole purchaser of medications distributed through the ADAP program.

Although AIDS advocates and providers in the Atlanta region are proud of the nationally recognized care model established at Grady, IDC officials have indicated that limited funding inhibits the clinic from realizing its full potential. Staffing shortages, for example, contribute to extensive waits to see a provider, limit the availability of supportive wrap-around services, and prevent the IDC from being optimally consumer-friendly. Were some or all of its low-income patients to be covered by Medicaid or a Medicaid-like funding stream, IDC officials state, such additional funding would help Grady maximize medical outcomes by enhancing access to needed services.

Atlanta Region – Other Safety Net Providers

Funding provided through Title I of the Ryan White CARE Act is primarily responsible for the HIV care infrastructure that currently exists for low-income people in the metropolitan Atlanta region. Although Atlanta's Title I funding technically flows from the Health Resources and Services Administration (HRSA) to the Fulton County Board of Commissioners, such funding actually serves a 20-county region. Allocation decisions for Title I funding in the Atlanta area are made by the local HIV planning council, which is comprised of clinicians, consumers, service providers and other interested persons from throughout the Atlanta metropolitan region.

HRSA distributes Title I funds to more than 40 metropolitan areas through a process that consists of a formula component geared to reported AIDS cases and a supplemental grant that depends on the quality of a jurisdiction's funding application. During the most recent funding period, HRSA awarded the Atlanta region approximately $13 million in Title I funding. Due to the limited natural care infrastructure for low-income people in the Atlanta region, the HIV planning council has historically directed the bulk of its award toward primary medical care. During the most recent period, the planning council identified access to pharmaceuticals and primary care as its two principal priorities.

The HIV planning council contributes $1 million of its award to support the State's ADAP program (described below). The bulk of the remainder underwrites primary care services. In addition to Grady's $6.5 million allocation under Title I, the HIV planning council funds a network of six outpatient clinics at AID Atlanta (a large community-based AIDS service organization), Clarke County Board of Health, Cobb County Board of Health, Dekalb County Board of Health, Fulton County Board of Health and Wellness, and St. Joseph's Mercy Care Services. Under the triage approach adopted by Atlanta HIV planning council, persons with symptomatic patients are referred to the Grady IDC, which specializes in the medical management of persons with advanced HIV disease, while those at an earlier stage of disease – i.e., those who are not symptomatic or who have CD4 counts higher than 200 – are normally referred to one of the six outpatient clinics.

Ryan White Title II, which is administered by the State (see discussion below), supplements the Title I care infrastructure with smaller primary care grants in areas of metro Atlanta outside the counties where Title I clinics are situated. In addition, Ryan White Title III, which provides direct HIV care grants to safety-net clinics, funds two relatively small clinics in Atlanta through Crawford-Long and St. Joseph's hospitals. (See discussion below.)

This care infrastructure, cobbled together through these various categorical funding streams, serves a patient population that is overwhelmingly low-income and underserved. Ninety-six percent of persons who received Ryan White services in the metro Atlanta region in 1999 had annual incomes under 300% FPL.[18] Sixty-two percent of the 6,768 Ryan White recipients in the Atlanta region in 1999 were uninsured, while 22% depended on Medicaid, 11% were privately insured, and 6% had other forms of public insurance.

Although the creation of this care infrastructure represents a visionary response by local leaders to the HIV/AIDS epidemic, it lacks sufficient funding to permit optimal care management for low-income persons in the region who are living with the disease. Because safety net providers rely principally on categorical funding, resources do not typically increase as medical demands and caseloads mount. Rationing of care, and delayed or deferred care, are inevitable. According to Ryan White officials in Atlanta, increasing caseloads have resulted in lengthier waiting periods for a comprehensive physical examination following a positive HIV test. According to the recently completed statewide needs assessment, ensuring access to care remains the principal HIV-related challenge in the Atlanta region.

Outside Atlanta – Safety Net Providers

Titles II and III of the Ryan White CARE Act together support the care infrastructure outside Atlanta for low-income people living with HIV.

Ryan White Title III

Title III directly funds health clinics to provide early intervention services to people living with HIV. Health centers must apply for such funding, demonstrating the local need for HIV early intervention services and their competence to delivery such care. Where such clinics exist, especially

[18] Based on information available on recipients of Georgia's ADAP program, the State estimates that more than 90% of Ryan White recipients in the Atlanta region have incomes under 235% FPL.

outside large urban areas, they typically function as the primary provider of HIV care for low-income persons in their part of the State.

In Georgia, Title III provides funding to nine HIV early intervention clinics, all but two of which are located outside the Atlanta region.

- The Albany Primary Care Center serves 14 counties.
- The Chatham County Health District has a Title III grant to serve a two-county area that includes Savannah.
- The Title III program at the Columbus Department of Public Health provides care to persons in a 16-county area.
- The Gwynn County Board of Health (Brunswick) serves a six-county region in southern Georgia.
- Hemophilia of Georgia operates a Title III clinic at Crawford-Long Hospital in Atlanta.
- The Lowndes County Department of Public Health (Valdosta) has a Title III grant to care for persons in a 10-county area.
- The Medical College of Georgia in Augusta has a Title III grant to serve a 10-county region.
- St. Joseph's/Mercy Mobile Medical Center cares for a primarily homeless population in inner-city Atlanta.
- In Waycross, the Ware County Board of Health operates a Title III program with a 16-county service area.

Figure 2 superimposes these Title III programs on a map of Georgia, which, as earlier described, has been color-coded to reflect density of AIDS prevalence.

Figure 2

Roughly half of all Georgia counties are technically covered by a Title III program, although patients in outlying counties are often forced to travel substantial distances to receive care. Altogether, Title III clinics care for an estimated 3,500 persons with HIV/AIDS, roughly half of whom are uninsured. As with other Ryan White programs, annual funding is capped, regardless of growth in caseload or increasing complexity of the medical needs of the patient population.

Title II

In order to expand health care access, the State directs more than half ($4.5 million this year) of its annual Title II base award ($8.4 million this year) toward primary care services throughout the State.[19] Such grants fund primary care programs in 17 of the State's 19 health districts. Title II-funded primary care programs provide care through a health department or hospital outpatient clinic, or through arrangements with private physicians in the area who accept payment based on Medicaid rates.

These primary care programs play a vital role in enhancing health care access, but they do not serve everyone in need. Eligibility guidelines are established by local care consortia, and most typically limit eligibility to persons with incomes not exceeding 200% FPL. In addition, grants tend to be relatively small, especially in relation to the rapidly growing need for HIV primary care services in small cities and rural areas of the State.

Figure 3, another version of the color-coded Georgia map, identifies the location throughout the State of both Title II and Title III health centers. This map essentially sketches the HIV safety net infrastructure for the State of Georgia.

[19] HRSA distributes Title II awards through two components. First, a base award – to underwrite care and support services for individuals and families with HIV – is made to states based on a formula tied to reported AIDS cases. In addition, Title II supports AIDS drug assistance programs in each state. (For discussion of ADAP's role in supporting the HIV care infrastructure in Georgia, see below.)

Figure 3

SECTION FOUR AT A GLANCE: "SAFETY NET" PAYERS FOR HIV CARE

- ***Roughly one in three people with diagnosed HIV infection in Georgia – or approximately 6,600 individuals – have no health coverage. It is reasonable to assume that the vast majority of such uninsured individuals have incomes below 235% FPL.***

- ***Medicaid currently cares for approximately 4,000 persons with HIV/AIDS, or less than 20% of persons in Georgia diagnosed with HIV infection.***

- ***Due to eligibility restrictions, it is extremely difficult for adult males with HIV infection to obtain comprehensive Medicaid coverage prior to advanced stages of HIV disease. Consequently, the bulk of low-income HIV-positive persons who are not in the latter stages of AIDS must look to categorically-funded safety-net programs (e.g., Ryan White, ADAP) to meet their HIV care needs.***

- ***Approximately 3,300 persons with incomes under 300% FPL – all but a small percentage of them uninsured – obtain HIV medications through the State's AIDS Drug Assistance Program.***

- ***Although Medicare has historically played little role in paying for HIV care, its prominence is increasing as people with HIV live longer. Eight percent of ADAP recipients in Georgia and more than 1 in 5 Grady IDP patients are covered by Medicare. Medicare, however, does not cover most prescription drugs, the centerpiece of HIV care.***

- ***In an effort to close gaps in the patchwork system of HIV care in Georgia, the Ryan White CARE Act annually delivers several million dollars for HIV care services throughout the State. In addition to ADAP, Ryan White principally supports categorical grants to safety-net providers throughout Georgia.***

- ***Due in large measure to low rates of health coverage and poorly developed care infrastructure in underserved communities, national studies indicate that one-half of all persons with diagnosed HIV infection are not in regular care.***

SECTION FOUR: "SAFETY NET" PAYERS FOR HIV CARE IN GEORGIA

The disproportionate impact of HIV/AIDS on low-income Georgians challenges the State to devise meaningful strategies to maximize health care access. According to the recently completed State-sponsored HIV needs assessment, lack of health coverage is the principal barrier to high-quality medical care for people with HIV in Georgia. This section identifies the key third-party payers for HIV care for low-income people in Georgia, notes gaps in health insurance coverage, and assesses the impact of existing financing systems on access to care.

Due to lack of data, it is difficult to determine precise patterns of insurance coverage among people with HIV in Georgia. According to the national HCSUS survey, 23% of persons with HIV in the South have private insurance, while 30% have no health coverage. (A copy of published HCSUS data is attached as Appendix F.) If these figures are applied to the estimated 22,000 persons with diagnosed HIV/AIDS in Georgia, one could conclude that at least 6,600 HIV-positive persons in Georgia have no public or private health insurance.

This narrative solely addresses third-party payment issues for low-income or medically underserved individuals and therefore does not examine payment systems for persons with private insurance.[20]

[20] At the provider level, there is little overlap between networks of providers that serve the privately insured and those that accept Medicaid or provide uncompensated care. This proposition is graphically displayed by the fact that despite Grady IDC's national reputation for delivering high-quality HIV care, only 2.6% of its patients are privately insured.

Medicaid

As explained in Section II, 3,783 persons obtained Medicaid services as to which HIV was listed as a primary or secondary diagnosis in FY1999. This population reflects approximately 17% of all individuals in Georgia with diagnosed HIV infection, or 22% of non-privately-insured HIV-positive persons in the State.

As in most other states, HIV-infected women and children are more likely to obtain Medicaid services than adult males with the disease. Whereas Medicaid normally provides care to HIV-positive adult males only when they are fully disabled, women, children and families who fall within prescribed income limits often gain access to Medicaid regardless of their disability status (via categorical eligibility under Temporary Assistance to Needy Families). Moreover, income restrictions are less severe for TANF recipients than for persons who are fully disabled; whereas women, children and families are allowed to have incomes up to 235% FPL, persons with disabilities are eligible for Medicaid only if their incomes do not exceed $512 per month. Georgia permits medically needy individuals to "spend down" their assets in order to obtain Medicaid, but such persons must still meet categorical eligibility requirements (e.g., TANF, SSI disability, etc.) before they can be covered.

In Georgia, eligibility for Medicaid as a result of one's disability requires prior determination of eligibility for SSI. An AIDS diagnosis alone (e.g., HIV opportunistic illness or CD4 count under 200) does not ensure the disability finding necessary to trigger SSI and Medicaid eligibility for persons who are income-eligible. Rather, SSI adheres to a functional test that excludes many people with an AIDS diagnosis in Georgia. In addition, SSI applicants must make less than $512 per month and satisfy rigorous asset/resource limits.

Eligibility determinations for Medicaid applicants are made by the Georgia Division of Family and Children's Services (DFACS), which has an inter-agency agreement with the Division of

Medical Assistance (DMA). DFACS has at least one office in every county and adheres to 45-day standard of promptness for new applicants (or 90 days if additional investigation of an applicant's claimed disability is required). Re-certification of eligibility occurs every six months for pregnant women, children, and families; every year for the aged, blind, disabled; and monthly for persons who are medically needy.

HIV-infected Medicaid recipients are eligible for a broad package of benefits, including hospitalization, doctor visits, prescription drugs, limited dental care, and certain substance abuse and mental health services.

Outpatient visits are limited to 12 per year without prior authorization, and the State places no limit on the number of hospital days covered by Medicaid. Dental coverage for adults is currently limited to emergency tooth extractions and other exceptional circumstances.

Georgia's Medicaid program has a monthly prescription limit of five for adults and six for children. Pharmacists, however, retain the discretion to override the limits in order to fill medically necessary prescriptions. Although Georgia requires prior authorization for certain medications, no HIV drug has such a requirement. Reimbursement for medications is based on a formula of AWP less 10%, with a dispensing fee of $4.63. The State actively monitors the program to ensure receipt of all pharmaceutical rebates to which the Medicaid program is entitled.

Medicaid also supports the Health Insurance Payment Program (HIPP), which pays insurance premiums for people who would otherwise be eligible for Medicaid. To enroll a person in HIPP, the State must determine that payment of the individual's insurance premiums would be less costly than covering medical care directly through Medicaid.

With respect to behavioral benefits (e.g., substance abuse, psychiatric care), the Georgia Medicaid program places no limits on acute hospitalization in hospital psychiatric units but does not reimburse for care provided by institutions solely dedicated to the treatment of mental illness. In

partnership with the Georgia Department of Human Resources (DHR), the Medicaid program offers a range of community mental health programs (e.g., outpatient mental health services, psychiatric services, nursing assessment, medications such as methadone maintenance, day programs, group services, ambulatory detoxification), access to which is limited solely by the test of medical necessity.[21] These community mental health programs are provided by a network of 29 statutorily created Community Service Boards. (A map depicting the boundaries of these 29 CSBs is attached as Appendix G.) A special psychology program is open only to children who are enrolled in Medicaid.[22]

Through a contract with DHR, an external review agency – American Psych System (APS) – oversees medical necessity and utilization and utilization reviews for Georgia's mental health and substance abuse program. Under the terms of its contract with DHR, APS' compensation is unrelated to quantities of care or services delivered to Medicaid eligibles; instead, APS is charged with ensuring that recipients receive the services they need and that prescribed services are medically warranted.

No Medicaid HMOs operate in Georgia, and the State has no extensive experience in capitated rate-setting for the Medicaid population. The State uses a percentage of Medicare rates and a cost-based methodology to reimburse for outpatient visits and non-institutional providers (such as home health, mental health, etc.). Hospital rates are DRG-based, with different rates for statewide, specialty, and pediatric hospitals.

Pursuant to a § 1915 waiver, Georgia currently operates a primary care case management program for the Medicaid population known as Georgia Better Health Care (GBHC). Under the

[21] As yet another route to mental health services, Medicaid recipients may avail themselves of psychiatric services by virtue of their normal eligibility for routine physician visits. In such circumstances, however, psychiatrist's visits are subject to the above-noted limits on physician visits.

program, Georgia matches Medicaid recipients to primary care providers who are responsible for coordination of services. (Persons with disabilities are permitted to have a specialist as their primary care case manager.) Enrollment is mandatory for persons who meet GBHC income eligibility guidelines.[23] More than 600,000 persons – or roughly two-thirds of the Medicaid population – are currently enrolled in the program.

Medicare

As people with HIV live longer, Medicare plays an increasingly prominent role as a payer of HIV care. According to the national HCSUS survey (Appendix F), 19% of people with HIV in the South who are in care depend on Medicare (either alone or in combination with another payer) for their health coverage. At Grady IDC, which cares for a relatively ill population, 22% of patients have Medicare coverage, whereas ADAP, which primarily (although not exclusively) serves a pre-disability population, only 8% of enrollees rely on Medicare.

Medicare does not cover most prescription drugs provided on an outpatient basis, and supplemental drug coverage is impossible for disabled, non-elderly Medicare beneficiaries to obtain. In the absence of dual coverage, indigent Medicare recipients must either foot the bill for HIV drugs on their own or (more typically) look to other safety net programs.

Ryan White

As described earlier, low rates of private insurance among the HIV-infected, combined with eligibility restrictions for Medicaid and Medicare, leave substantial percentages of people with HIV without health coverage. To close gaps in health care access, the Ryan White CARE Act provides

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[22] The pharmacy benefit is separate from the general mental health and substance abuse package available to Medicaid recipients.

[23] 200% FPL for pregnant women and families; 74% FPL for a SSI eligibles; and 31% FPL for medically needy.

medical and social services to a predominantly uninsured population of persons living with HIV in Georgia. In the Atlanta region, where two out of three HIV/AIDS cases reside, more than 60% of persons who receive care through Ryan White programs have no source of third-party reimbursement for health services.

The services provided through Ryan White have been described earlier. In summary, during the most recent year, the program funneled $13 million in federal funding for HIV services to the Atlanta region through Title I, $8.4 million for HIV services to the entire State through Title II, $16 million in support for statewide AIDS drug assistance (see below), and several million dollars in direct support to nine HIV early intervention clinics.

ADAP

Georgia's AIDS Drug Assistance Program is the backbone of all Ryan White safety net programs in the State, in that, without it, uninsured or underinsured people with HIV/AIDS have no meaningful access to life-saving drug therapies. Without means to cover the prescription drug costs of their patients, few of the above-mentioned clinics would have the wherewithal to serve more than a small fraction of their current patient population.

Georgia operates a $24 million ADAP program that currently serves 3,299 persons – a 31% increase over the prior 12 months. The federal government contributes $16 million to the program through Ryan White Title II, and the State (with assistance from the Title I planning council) covers the rest. Persons with HIV infection, fewer than 500 CD4, and income under 300% FPL are eligible for the program.

Historically, the State has maintained a lengthy waiting list, leading to months-long delays in access. In June 1999, 1,421 people were on the waiting list for ADAP. In late 1999, however, the State overhauled administration of its ADAP program to accelerate access to the program. Today, there is no waiting list for ADAP in Georgia.

Prior to April 2000, the ADAP program covered only 16 drugs – i.e., approved antiviral compounds. Beginning in April 2000, the State expanded the formulary to 43 drugs. In addition to all approved antivirals, the State includes a broad range of drugs for the prevention and treatment of opportunistic infections and for treatment of side effects commonly associated with HIV medications.

Despite its critical function, ADAP does not serve all income-eligible persons with HIV. As noted above, ADAP excludes persons with fewer than 500 CD4. According to data collected by ASD and by the Atlanta Title I program, persons with CD4 count greater than 500 make up more than 20% of the population of low-income persons with diagnosed HIV infection who are in care.

Grady IDC centralizes purchase of all ADAP pharmaceuticals through Grady Memorial Hospital, which benefits from the discounted prices offered to the United States Public Health Service. Under Georgia's ADAP program, prescriptions written by physicians around the State are forwarded to the State for data entry, then forwarded to Grady, where they are processed and mailed to the physician for dispensing. Grady averages 1700-1800 prescriptions per month through ADAP.

As noted earlier, roughly one-half of ADAP recipients have CD4 counts between 200-500. Due to eligibility restrictions in Georgia's Medicaid program, however, ADAP also covers medications for a substantial number of low-income Georgians with extremely advanced HIV disease. In 1999, nearly 10% of ADAP recipients – 247 individuals – had CD4 counts under 50; 411 recipients, or more than 15%, had CD4 counts under 100; and 30% (775 individuals) were below 200 CD4.[24]

[24] Persons with fewer than 200 CD4 are considered to be at high risk for HIV-related morbidity, with the risk increasing as CD4 count declines. Persons with a CD4 count below 50 are generally regarded as being at sharply higher risk of HIV-related death.

SECTION FIVE AT A GLANCE: PROPOSED DEMONSTRATION PROJECT

Georgia proposes to phase in over 3-5 years a demonstration project to maximize health care access and improve health care outcomes for low-income persons with HIV. Key elements include:

- ***Eligibility (subject to enrollment caps) for HIV-infected individuals with incomes under 235% FPL;***
- ***Care provided by multi-discriplinary care teams at designated HIV Centers of Excellence;***
- ***Access to all medically necessary drugs through unique partnership with AIDS Drug Assistance Program;***
- ***Doctor visits, hospital benefit, and mental health and substance abuse services;***
- ***Rigorous clinic-based case management program to promote treatment adherence;***
- ***Extensive provider training and quality assurance measures to ensure that care provided under the demonstration project is in keeping with recommended treatment guidelines;***
- ***Thorough input from key stakeholders in the formation and implementation of demonstration project; and***
- ***Extensive evaluation to document project's success in meeting program objectives.***

SECTION FIVE: PROPOSED DEMONSTRATION PROJECT

The disproportionate impact of HIV/AIDS in Georgia on low-income persons – combined with eligibility restrictions in the Medicaid and Medicare programs – has left substantial numbers of HIV-infected individuals without any source of third-party reimbursement for their health care. Such persons inevitably depend on safety-net providers, who in turn rely on sharply limited categorical funding streams.

The underfunded and fragmented nature of HIV safety net services produces numerous results that are contrary to basic public health objectives:

- Persons who should receive antiretroviral therapy either cannot, or do not, obtain such medications due to lack of insurance;
- When low-income persons manage to obtain HAART, funding shortages and escalating caseloads often impede safety net providers from monitoring patients as aggressively as they would like and further inhibit providers' capacity to provide the supportive wraparound services that enhance treatment adherence; and
- Some patients, especially those who receive care from well-intentioned but HIV-inexperienced providers, are prescribed improper therapy, such as a single antiviral regimen, or fail to receive indicated treatment, such as prophylaxis against PCP.

In light of the overwhelming evidence of the benefits of timely HIV treatment, it is reasonable to assume that such impediments cause HIV disease to advance more quickly than it otherwise would with proper treatment, generating unnecessary hospitalization and treatment costs associated with symptomatic, advanced disease.

To maximize access to the benefits of recent breakthroughs in the medical treatment of HIV disease, Georgia proposes – through an unprecedented collaboration between the Medicaid and Ryan White programs – to provide a comprehensive set of benefits to low-income persons with HIV, regardless of their stage of their disease. To ensure that services delivered under the proposed

demonstration project are of the highest quality, Georgia proposes to care for patients enrolled in the project in HIV Centers of Excellence, to mandate a range of aggressive and ongoing case management activities to promote adherence to treatment, and to undertake extensive provider training and quality assurance measures.

The State of Georgia submits that the proposed program will:

- Improve the health and well-being of people living with HIV;
- Reduce and/or delay HIV-related hospitalization costs, the incidence of HIV opportunistic infections, and the intensive costs of terminal care;
- Enable HIV-positive working people to remain employed, with associated tax benefits to both the federal government and the State of Georgia; and
- Promote the integrity and sound fiscal management of Georgia's Medicaid program by realizing the above-described public policy objectives without spending funds that would not otherwise have been spent in absence of the requested waiver.

This section outlines the elements of Georgia's proposed demonstration project. (The narrative below uses the term "Medicaid" to refer to the current Medicaid program, which would remain unchanged if this waiver were granted, and the term "demonstration project" to refer to provisions that would apply to participants in the proposed demonstration project.)

Eligibility

Participation in the demonstration project will be voluntary and open to persons with documented HIV infection and income under 235% FPL. As described below, enrollment will be capped in phases and a waiting list established once the cap has been reached. An individual who meets the eligibility criteria set forth herein but who is placed on the waiting list due to capped enrollment will not be legally entitled to enroll in the demonstration project, and placement on a waiting list will not be an appealable adverse decision. (For a discussion of appeal rights under the demonstration project, see below.)

HIV-positive persons who are currently covered by Medicaid will not be enrolled in the demonstration project but will instead continue to receive their services through Medicaid. Persons with Medicare coverage will be excluded from the demonstration project (although such persons will remain eligible to receive drugs through ADAP).

Georgia is currently developing innovative and consumer-convenient approaches to determining eligibility determinations for applicants who wish to enroll in the demonstration project.

The 235% FPL income limit for participation in the demonstration project will be absolute. Persons above 235% whose medical expenses, if deducted, would fall below the income threshold will not be eligible for the program (although such individuals may obtain drugs through ADAP).

In accordance with current Medicaid practice, applicants for the demonstration project must have personal assets totaling no more than $2000 (excluding home; automobile, if used for medical care; and $5,000 burial policy).[25] In recognition of the project's goal to prevent or significantly delay disability, the asset test will exempt retirement accounts (e.g., 401(k), 403(b), IRA, etc.) Persons with incomes below 235% FPL will be permitted to spend down assets to become eligible for the demonstration project.

In connection with the demonstration project, Georgia proposes to develop a protocol for expediting eligibility determinations. Elements of the protocol may include periodic stationing of DFACS staff in key health care entry points (e.g., counseling and testing sites, community health centers, public hospitals, etc.) and/or special training for case managers to assist eligible patients in the completion and processing of Medicaid applications. Applicants will be required to present relevant proof of their income and assets.

[25] The $5,000 allowance for burial policy follows Georgia's more relaxed asset test for Medicaid applicants who desire to be institutionalized. For typical Medicaid applicants, the burial exemption is $1,500.

Eligibility for individual participants in the demonstration project will be determined on a bi-annual basis (on the successive six-month anniversaries of the beneficiary's initial enrollment in the demonstration project), with one such recertification each year requiring a face-to-face interview with DFACS staff. Applications to enroll in the project will be accepted on a continual basis.

Benefits – Drug Therapies

Persons enrolled in the demonstration project, regardless of CD4 count, will be automatically enrolled in ADAP. Upon approval of the demonstration project, the ADAP program will implement a two-tier formulary.

- ***ADAP for Persons Enrolled in the Demonstration Project***

  Persons dually enrolled in both ADAP and the demonstration project will receive their antiviral drugs through ADAP. The demonstration project will provide enrollees with all non-antiviral HIV drugs (e.g., therapies for the treatment or prevention of opportunistic illnesses or for the management of side effects related to HIV disease or HIV treatment), as well as non-HIV-related, medically necessary medications.

- ***ADAP for Persons Not Enrolled in the Demonstration Project***

  Persons not enrolled in the demonstration project (e.g., Medicare recipients, persons whose income is between 235-300% FPL, eligible individuals who elect not to enroll) will receive the current formulary of ADAP drugs (e.g., all HIV antivirals, as well as drugs to treat or prevent OI's and to manage side effects).[26]

[26] The State has undertaken a careful financial analysis of its ADAP program to ensure the financial viability of this approach. The recently developed long-term cost analysis of ADAP anticipates a growth rate (consistent with reasonably anticipated revenues from the State and the Ryan White CARE Act) of more than 2,000 persons over current enrollment levels by mid-year 2002. This will more than accommodate the initial phase of enrollment in the demonstration project (see below), as well as build capacity for the future enrollment of thousands of additional persons.

Upon implementation of the demonstration project, eligibility criteria limiting ADAP participation to persons with fewer than 500 CD4 will be removed.

In keeping with current practice, the State will outsource (but still closely oversee) the administration of the ADAP program, with oversight by the Department of Human Resources (in collaboration with the Department of Community Health). As clinicians currently do with ADAP drugs, HIV Centers of Excellence (described below) will forward enrollees' antiviral prescriptions to the Grady pharmacy, which will fill these prescriptions and forward them to the Center. Placing responsibility with the HIV Centers of Excellence for dispensing of antiviral medications will enhance the ability of the patient's care team to monitor and improve adherence.

Enrollees in the demonstration project will obtain drugs other than antiviral medications at local pharmacies that participate in the Medicaid program. The State Medicaid program's new pharmacy benefits manager will oversee the demonstration project's drug benefit.

Benefits – Non-Drug Services

Persons enrolled in the demonstration project will be eligible to receive the following non-drug-related services –

- ***Outpatient Physician Visits***

  Physician visits for demonstration project enrollees will be limited to 24 in any calendar year. Specialist visits will be included within the annual cap. Medically appropriate colcoscopies and anoscopies will be excluded from the 24-visit cap.

- ***Hospitalization***

  Medically necessary hospitalizations will be covered by the demonstration project.

- ***Diagnostic and Other Laboratory Tests***

  All medically necessary laboratory tests will be provided to enrollees.

- ***Primary Care Case Management***

  Enrollees in the demonstration project will not participate in Georgia Better Health Care, the existing primary care case management program for Medicaid recipients. Rather, Centers of Excellence participating in the demonstration project will be required to undertake heightened, HIV-specific primary care case management activities for each person enrolled in the project. To obtain reimbursement for primary care case management pursuant to the demonstration project, Centers of Excellence must satisfy rigorous quality assurance requirements, including having appropriately trained personnel, performing comprehensive and timely needs assessments, having regular contacts with each enrollee, undertaking follow-up activities after missed appointments, providing treatment education and HIV prevention counseling, and linking patients in appropriate circumstances to services needed to enhance treatment adherence.

  The case management program will be patterned after Georgia's SOURCE (Services Options Using Resources in a Community Environment) program, which serves older or functionally impaired Medicaid recipients. The SOURCE program relies on regular contacts between case managers and clients and on identified "triggers" (such as recent hospitalization, exacerbation of illness, or new diagnosis) that necessitate heightened case management services. Using SOURCE as a model, Georgia will devise a written protocol for the HIV case management benefit, consistent with the overall goals of the demonstration project, and will undertake audits and otherwise oversee case management programs to ensure adherence to the protocol. (A copy of the SOURCE protocol is attached as Appendix H.)

- ***Mental Health and Substance Abuse Services***

  Enrollees in the demonstration project will have access to a tailored set of mental health and substance abuse benefits under the previously described CSB program. Specifically, enrollees will be eligible to receive nurse assessment and education; physician assessment and care; individual therapy; family therapy; group therapy; intensive outpatient substance abuse services; and ambulatory detoxification.[27] Consistent with current practice, the mental health and substance abuse component of the demonstration project's benefit package will be managed by the same external review agency that oversees these and other similar benefits under the Medicaid program.

- ***Health Insurance Continuation***

  To the extent that paying private insurance premiums will be less costly than enrolling the eligible person in the demonstration project, premiums for private insurance will be paid by the demonstration project. This component of the program will be administered by the existing HIPP program, described earlier.

Participants in the demonstration program who become eligible for SSI will have access (in accordance with applicable rules or restrictions) to the full range of benefits currently provided by the State's Medicaid program, including hospitalization, nursing home care, and the like, and, as discussed below, will be immediately disenrolled from the demonstration project.

Providers

In contrast to the Medicaid program, in which beneficiaries are entitled to obtain care from any participating provider, enrollees in the demonstration project will be required to obtain care

from an "HIV Center of Excellence" of their choice. The State will issue an RFP to designate at least one HIV Center of Excellence in each of the State's 19 health districts. (A map depicting the boundaries of the 19 health districts is attached as Appendix I.)

Applications for designation as a Center of Excellence will be considered and approved based partially on a statement of needs for the HIV-positive population in that health district and the ability of the provider/applicant to serve that population. Applicants must establish:

- Liaison with pharmacies within the health district that agree to stock and provide the non-ADAP-covered drugs needed by enrollees in the demonstration project;
- Liaison with local CSB to provide mental health and substance abuse services, or, in the alternative, proof that the applicant is both qualified and prepared to provide such services directly (with reimbursement at CSB rates);
- Case management programs (in accordance with State standards, as described above) either directly provided by the Center of Excellence or provided on-site at the Center by a local social service organization pursuant to subcontract with the Center;
- Articulation of a coordinated, multi-disciplinary team approach to patient management;
- Liaison with an inpatient facility in the health district that will accept inpatient admissions, including proof that one or more physicians at the Center have medical staff privileges at such hospital;
- Grand rounds/continuing provider education programs, provided directly or through an affiliation with a graduate medical education program and/or with the Ryan White-funded regional AIDS Education and Training program;
- Patient referral agreements with local AIDS service organizations, county departments of health, substance abuse providers, mental health providers, HIV counseling and testing sites, and agencies serving populations at high risk for HIV infection;
- Demonstrated ability to provide or refer patients to specialty treatment required in the course of HIV care[28]; and

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[27] This tailored package represents a subset of the mental health and substance abuse services available to Medicaid recipients. For each of these services, the demonstration project will adopt service definitions and protocols already in place under Medicaid.

[28] Range of sub-specialties which each HIV Center of Excellence must be equipped to provide (on-site or through accessible referrals) include Dermatology, Oncology, Ophtalmology, Gastroenterology, Hematology, Nephrology, Dentistry, and Obstetrics/Gynecology.

- Demonstrated sensitivity to low-income populations affected by HIV/AIDS.

The State envisions that this network will build on clinical networks supported currently through Ryan White Titles I, II, and III, as these sites currently care for the large majority of low-income persons in care, although all respondents to the RFP will be considered on an equal basis, regardless of whether they have received Ryan White funding in the past. In parts of the State where the HIV care infrastructure is especially weak, the State will undertake pro-active efforts, financed in part by a portion of the State funding streams identified below, to build capacity in these regions.

For each patient, the primary care physician at the Center of Excellence will be responsible for overseeing a case team consisting of relevant medical personnel, the patient's case manager, mental health and substance abuse provider(s), and other providers of services to the patient. The team will communicate and cooperate with one another to support the delivery of high-quality, consumer-centered care and to maximize patient adherence to prescribed therapy.

In creating this HIV primary care network, Georgia seeks to ensure that:

- HIV-infected patients are properly managed in accordance with the prevailing standard of care;
- The State maintains the capacity to monitor and evaluate the proposed demonstration project; and
- No HIV-positive patient is required to travel for medical care more than one hour from his or her place of residence.

Re-Direction of Existing Funding Streams

A portion of Ryan White Title II funds currently used to support primary care services in health districts throughout the State will be re-directed as necessary to support services provided through the demonstration project.

Provider Reimbursement

Georgia's Medicaid program lacks extensive experience in establishing capitated rates for health care payments. Indeed, no Medicaid HMOs currently operate in the State. Building on current Medicaid practice in Georgia, the State will pay providers for services delivered pursuant to the proposed demonstration project as described below:

- ***Outpatient Visits***

  Primary care visits will be reimbursed on the basis of Medicaid fee schedules established for physicians (which are based on a percentage of Medicare rates). CPT codes billable for demonstration project services will be limited to 99201-99205 (New Patient Office Visits) and 99211-99215 (Established Patient Office Visits). Consultations may also be billed (99241-99245) (New or Established Patient Outpatient Consultation), but will be included among the 24 annual allowable visits.

- ***Hospitalization***

  Costs associated with hospitalization of demonstration project enrollees will be reimbursed in accordance with current Medicaid payment practices (i.e., DRG payments).

- ***Pharmaceuticals***

  For drugs covered by the demonstration project, the State will employ the same payment scheme for drugs as the Medicaid program (AWP – 10%, plus dispensing fee of $4.33 for non-profits and $4.63 for for-profit pharmacies). In keeping with current ADAP practice, antiviral medications will be purchased by Grady Memorial Hospital.

- ***Primary Care Case Management***

  A monthly rate of $75.00 will be established for primary care case management. Providers will qualify for this rate only upon providing the State with documentation that they have satisfied rigorous quality assurance requirements which the State will establish. (See discussion above.)

- ***Insurance Continuation***

  The demonstration project will pay insurance premiums for otherwise eligible individuals if, using procedures currently employed by Medicaid, the State determines that it would be less costly to Medicaid to do so.

- ***Outpatient Mental Health and Substance Abuse Services***

  Providers of mental health and substance abuse services under the demonstration project will be reimbursed at the same rates currently used by Medicaid. (A listing of applicable per-unit rates for such services is attached as Appendix J.)

Providers will be required to account for receipts under the demonstration project separately from Medicaid reimbursements.

Enrollment Cap

Georgia anticipates that approximately 6,500 persons in the State will eventually participate in the demonstration project. These include current ADAP enrollees; low-income individuals who are currently in care but do not use ADAP; low-income persons who have been diagnosed with HIV but do not currently access care; and future persons identified through HIV testing.[29]

[29] According to the HCSUS study, 30% of people with HIV in the South lack health coverage. If this figure (in the absence of reliably representative data specific to Georgia) is applied to the estimated 22,000 persons with diagnosed HIV currently living in Georgia, one can conclude that 6,600 persons with diagnosed HIV infection are not presently

Georgia intends to enroll persons in the demonstration project in three phases, during each of which a cap on enrollment will be adopted. Phase One, during the first 12 months of the demonstration project, will concentrate on the rapid enrollment of a substantial portion of the ADAP population, as well as persons not enrolled in ADAP who currently receive care in Ryan White-funded safety-net programs. During Phase One, enrollment will be capped at 1,000.

In Phase Two, which will start at the beginning of the second year of the demonstration project and terminate at the end of the third year of the demonstration project, the State will begin enrolling the remainder of the population eligible for the demonstration project. (See discussion below regarding outreach strategies to be pursued by the State.) During Phase Two, enrollment will be capped at 3,500.

Phase Three will begin on the first day of the fourth year of the demonstration project, during which the State will complete enrollment of the eligible population. The cap for Phase Three will be 6,500. This cap shall remain in place for the duration of the demonstration project, although the State reserves the right to petition HCFA to alter the cap in accordance with program experience and demonstrated need.

During each enrollment phase of the demonstration project, a waiting list will be created once the enrollment cap has been reached. As places in the demonstration project become available – through mortality or disenrollment (see below) – persons on the waiting list will be enrolled in the order in which they were added to the list. Existing safety net programs – primarily funded through Ryan White – will help ensure that persons on the waiting list obtain primary care until they can be enrolled in the demonstration project.

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covered by public or private insurance. If one assumes that 90% of such persons are below 235% FPL, it appears that 5,940 persons with diagnosed HIV infection would be eligible to participate in the demonstration project. To ensure that capacity exists for income-eligible persons who test positive in the future, the State estimates a total demonstration project population of 6,500.

The State reserves the right to petition HCFA for amendment to the demonstration project's phase-in schedule.

Informed Consent

The State will develop comprehensive, easy-to-understand, and culturally- and linguistically-appropriate educational materials for applicants and new enrollees describing both the demonstration project, as well as the rights and responsibilities of all enrollees. The State will undertake substantial education and training activities for case managers, DFACS personnel, and staff at HIV counseling and test sites regarding strategies for counseling and informing potential enrollees of the demonstration project. Prior to enrolling any person in the demonstration project, the State will ensure that each individual is informed of the nature of the project, the ways in which the demonstration project differs from the Medicaid program, and that enrollment therein entitles the individual only to the above-described benefits. In addition, enrollees will be notified of all grievance procedures associated with participation in the demonstration project. (See below.)

Outreach

Immediately upon approval of the waiver application, Georgia will initiate a focused and aggressive outreach program to enroll in the demonstration project eligible individuals residing in the State. During Phase One of enrollment, outreach efforts will target current ADAP recipients, medical clinics where people with HIV currently receive services, and AIDS service organizations. In Phases Two and Three, outreach will be expanded to other community organizations, HIV counseling and testing sites, and church groups. Appropriate media outlets will be used to advise persons living with HIV/AIDS of the availability of services under the demonstration project.

Quality Assurance and Evaluation

In an effort to promote quality assurance, Georgia's Medicaid program currently undertakes retrospective chart review and other efforts to monitor the quality of care provided to Medicaid recipients. In contrast to many other conditions, HIV/AIDS is a relatively new, rapidly evolving disease, the medical management of which is increasingly complex. The State will need supplemental quality assurance data to, among other things, document the impact of the proposed demonstration project, distinguish the demonstration program's impact from those potentially deriving from other HIV-related funding streams or unrelated changes in the health care environment, and monitor carefully enrollees' adherence to prescribed therapies. Relying on federal HIV treatment guidelines and other recognized authoritative sources regarding standard HIV clinical pathways, Georgia will issue quality assurance guidelines governing the HIV Centers of Excellence created under the proposed demonstration program. In connection with these guidelines, the State will empanel an HIV Quality of Care Committee (comprised of HIV clinicians from throughout the State) that will meet quarterly to assess changes in the standard of care and to advise the State on quality assurance issues related to the demonstration program.

The State intends to retain a qualified outside vendor to perform quality assurance functions associated with the demonstration program, such as chart review, analysis, and the like, as well as periodic enrollee satisfaction surveys. Among other things, this outside quality assurance vendor will collect data on cost savings derived from improvements `generated by the demonstration program in the quality and continuity of care to people with HIV. The outside vendor will assist the State in preparing semi-annual reports to HCFA regarding the impact of the demonstration program. Specifically, the outside vendor will collect data relevant to the evaluation of the demonstration project's success against the following propositions on which the project is based:

- That expansion of comprehensive medical coverage to low-income HIV-infected persons who do not currently qualify for Medicaid will improve health care outcomes without imposing additional long-term costs to the federal government;

- That the preceding result may be obtained in rural areas and smaller cities, as well as in large urban areas;

- That limiting provider eligibility to HIV Centers of Excellence will improve health care outcomes more efficiently and effectively than allowing open eligibility to all providers;

- That designing an HIV care system based on close and careful coordination between the Medicaid and Ryan White CARE Act programs will improve health care outcomes without imposing additional long-term costs to the federal government; and

- That a client-centered primary care case management program, combined with extensive medical training and quality assurance measures, will improve health care outcomes and increase medication adherence without imposing additional long-term costs to the federal government

Provider Education

In coordination with AIDS education and training efforts funded by Title V of the Ryan White CARE Act, the State will ensure, to the maximum extent feasible, that providers at HIV Centers of Excellence are thoroughly informed and educated regarding applicable standards of care. Special efforts will be made to inform providers in a timely manner of any changes in such standards.

Disenrollment

Individuals may voluntarily disenroll from the waiver at any time, by signing an affidavit or State-approved form, requesting discontinuation of services. Once an applicant disenrolls, he/she may request re-admittance by submitting a new request for enrollment or by requesting a re-admittance within 30 days after disenrollment. Applicants who request re-admittance into the waiver program after 30 days of disenrollment will be required to submit again to the eligibility review process and be placed on a waiting list, if one exists.

Persons who, while enrolled in the demonstration project, become eligible for Medicaid, will be disenrolled from the project and immediately enrolled in Medicaid. To ensure continuity of care during the transition from the demonstration project to Medicaid, former demonstration project enrollees who become eligible for Medicaid will be enrolled in Georgia Better Health Care (GBHC) and assigned to the same primary care physician from whom the individual received care under the demonstration program, if that physician is enrolled in GBHC. Previous enrollees in the demonstration project who become eligible for Medicaid will be eligible to continue receiving their care at their HIV Center of Excellence.

Appeals and Grievance Procedures

In accordance with current Medicaid procedures, all adverse decisions (with the exception of placement on a waiting list due to capped enrollment) may be appealed, as provided for in the DCH appeals procedures.

Community Advisory Board

Following outreach to the Georgia AIDS Task Force[30] and HIV/AIDS advocates in Georgia, the State will designate a committee of persons living with HIV/AIDS and their advocates to advise the State on implementation of the demonstration project. The State will take special measures to ensure that the Community Advisory Board is demographically diverse (in terms of race/ethnicity, gender, sexual orientation, personal and professional experience, etc.) and that it includes substantial representation from areas of the State outside Atlanta, including rural areas and smaller cities.

[30] The Georgia AIDS Task Force is comprised of more than 40 members appointed by the Governor and the State legislature. The Task Force advises the Board of Human Resources and the Division of Public Health regarding HIV-related strategies for prevention, education, advocacy, public policy, treatment, care and housing. Participants include representatives of State agencies, correctional officials, private physicians, HIV-positive individuals, professional medical associations, community-based organizations, drug treatment and mental health providers, and providers of dental services to people with HIV/AIDS.

Public Input in the Development of Demonstration Project

In developing the concept for the proposed demonstration project, the State of Georgia consulted a broad range of stakeholders – including consumers and providers – and solicited public comments on a concept paper that was previously submitted to HCFA. This consultative process resulted in substantial changes to the project concept, underscoring the State's desire to work in partnership with consumers, providers, and affected communities in expanding health care access through this demonstration project.

Upon deciding to seek a waiver to implement an HIV demonstration project, the State contracted with the Georgia AIDS Coalition, a community-based HIV public policy and advocacy group, to collaborate with the State in the drafting of this application. The Georgia AIDS Coalition, in turn, subcontracted with two HIV policy experts to undertake research related to the waiver request, conduct statewide outreach to key stakeholders, work with the State to refine the concept for the demonstration project, and draft this application.

Consultants for the Georgia AIDS Coalition made presentations to the following groups:

- The Governor's AIDS Task Force, a statewide body of more than 40 persons from around the State who represent consumers, clinicians, public health experts, community-based organizations, and HIV advocates; and
- The Atlanta EMA Ryan White Title I planning council, a body of more than 70 representatives charged with establishing spending priorities for HIV care in the 20-county Atlanta metropolitan area.

The consultants also had face-to-face meetings with the following persons or groups:

- Directors and other senior staff at the State's Ryan White Title III early intervention clinics;
- Staff of the Atlanta EMA Title I program;
- Senior staff of the State's Ryan White Title II program (including the administrator of the State's ADAP program);

- Executive directors of numerous AIDS organizations in the Atlanta metropolitan area;
- Senior staff – both administrative and medical – at the Infectious Disease Clinic of Grady Memorial Hospital;
- Senior staff at the AIDS Research Consortium of Atlanta; and
- Dr. Joseph O'Neill, director of HRSA's HIV/AIDS bureau, and Wayne Smith, senior policy advisor for the bureau.

In connection with each of these presentations and/or meetings, feedback from attendees on the demonstration project concept was solicited. On numerous occasions, the input provided by these stakeholders resulted in substantial changes to the demonstration project concept. These changes have been reflected in this waiver application.

In addition, the consultants met with more than two dozen State officials who are responsible for various activities associated with the finance or delivery of HIV-related care and services.

Following such consultation, the State revised its original concept and officially sought public comment thereon. (A copy of the revised concept paper, regarding which public comment was officially solicited, is attached as Appendix K.) The public comment period ran from May 9 through May 30. The concept paper on which comment was solicited was widely publicized and disseminated through the following means:

- The Georgia AIDS Coalition undertook a statewide mailing to more than 350 organizations and individuals. The mailing included copies of the concept paper and alerted recipients to the deadline for public comments.
- The concept paper, along with information regarding the public comment process, was placed on the World Wide Web sites of the Georgia Department of Community Health and the Georgia Department of Human Resources.
- The Georgia Department of Community Health issued a news release regarding the proposed demonstration project and the public comment period.

- Various newspapers throughout the State – including the *Atlanta Constitution*, a newspaper with statewide circulation and the most widely read journal in the State – published notices of the public comment period.

- Consultants to Georgia AIDS Coalition alerted participants in the above-described presentations and meetings to the public comment period.

Georgia received 38 written comments regarding the proposed demonstration project. Twenty-seven of these comments were supportive of the project. Seven opposed the proposed project. Two took no position but merely posed certain questions, and another supported the concept of the waiver but questioned whether it could be implemented appropriately in Georgia.

The State carefully reviewed each of the written comments. In several instances, the State revised the waiver concept to integrate the suggestions made by persons who responded during the public comment period. Below is a summary of the key comments received by the State, as well as the State's response with respect to the project proposed herein.

Comment: All of those opposed to the demonstration project contended that it was an improper use of tax dollars to care for persons suffering from a condition that allegedly resulted from poor, unhealthy lifestyle choices.

Response: The State considered and rejected this contention. The proposed demonstration project furthers the longstanding State policy to provide humane, non-discriminatory care to persons living with HIV/AIDS and to strive to reduce the human suffering associated with the disease. Furthermore, the State submits that the cost-effectiveness of the demonstration project (as described in the following section) makes the sought-after waiver an excellent use of taxpayer dollars.

Comment: A minority community-based organization questioned whether racial prejudice would preclude participation in the demonstration project by minority providers. The organization urged the State to "give serious consideration to the role that your office can play in fostering the kind of equity needed in African American communities to build lasting relationships between provider and community."

Response: Amending the original concept paper, the State, in response to this comment, added the requirement that applicants to become HIV Centers of

Excellence under the demonstration project demonstrate their sensitivity to diverse populations living with, and affected by, HIV/AIDS. Based on extensive experience, the State submits that it has the proven capacity to devise a fair and equitable RFP to advance the objectives of the demonstration project.

Comment: Numerous comments expressed concern with the provision in the original concept paper that limited the prescription drug benefit to HIV-related medications.

Response: The State agrees with this comment and has determined to extend the prescription drug benefit in the proposed demonstration project to all medically necessary pharmaceuticals. Antiviral medications will be provided to demonstration project participants through ADAP.

Comment: Certain comments expressed concern that transportation was not a covered benefit.

Response: The State has concluded that safety net programs outside the demonstration project, including Titles I and II of the Ryan White CARE Act, will be able to support transportation costs incurred by enrollees in the demonstration project. Although the State does not propose to include transportation as a covered benefit under the demonstration project, it will undertake efforts to (1) assess the impact of lack of transportation on enrollees' access to services pursuant to the demonstration, and (2) report such findings to appropriate planning bodies under Titles I and II.

Comment: Questions arose as to whether persons would be required to receive care at the HIV Center of Excellence nearest their place of residence.

Response: In response to this concern, the State has added a provision to its demonstration project concept confirming the right of enrollees to select the HIV Center of Excellence of their choice. The State believes that the vast majority of enrollees will elect to receive care nearest their home, but this will not be a prerequisite to receipt of services under the demonstration project.

Comment: Certain comments expressed concern that physician visits were limited to 24 each year and recommended that exceptions be allowed in cases of medical necessity.

Response: This proposed demonstration is simply unable to provide unlimited benefits to enrollees. To expand basic health care services to persons who currently lack them, the State must necessarily draw certain boundaries to the project. Georgia believes that 24 visits should more than suffice to provide exceptionally high-quality care to persons with HIV infection. It is anticipated that few enrollees will require more than 24 visits in any 12-month period. Safety net programs, including funding under the Ryan White CARE Act, will largely remain available to cover the costs of caring for the additional physician visits, if needed.

Comment: One comment asked about appeal rights for persons whose applications for participation in the demonstration project are denied.

Response: Georgia has added specific provisions to the demonstration project proposal to reflect the existence of standard appeal rights and grievance procedures that satisfy due process requirements.

Comment: Various individuals recommended that the demonstration project's Community Advisory Board reflect participation from all parts of the State, including rural areas.

Response: The State has revised the concept for the demonstration project to make express the need for statewide representation, including from rural areas and smaller cities.

Comment: One comment urged that HIV Centers of Excellence be required to provide the range of specialty care needed in the treatment and management of HIV disease.

Response: Georgia agrees and has revised the demonstration project concept accordingly.

Comment: Certain comments asked whether HIV-positive individuals with incomes greater than 300% FPL would be permitted to spend down their personal resources to become eligible for the demonstration project.

Response: Since publication of the concept paper, the State has determined that the income eligibility test for participation in the demonstration project should be 235% FPL, rather than 300%. The 235% limit accords with current practice in other aspects of the Medicaid program, whereas Georgia has no experience in providing Medicaid services to persons up to 300% FPL.

For purposes of eligibility, the 235% income limit will be absolute. No income spend-down will be recognized by the project. This strict rule is necessary due to the excessive difficulty and massive administrative costs associated with calculating income limits while taking into account medical expenses. Such persons will remain eligible for ADAP and other Ryan White services. However, potentially eligible individuals will be permitted to spend down assets to meet asset requirements associated with participation in the demonstration project.

Comment: One comment recommended that specialized procedures, such as lumbar punctures, be excluded from the 24-visit limit on physician services.

Response: Georgia has considered and rejected this suggestion. As noted earlier, existing safety net funding sources will continue to be available to support the capacity needed to deliver care in excess of 24 visits per year. In response to a related comment, however, the State has excluded colcoscopies and anoscopies from the 24-visit limit.

Comment: One comment recommended that providers be required to account for receipts under the demonstration project separately from reimbursements received from Medicaid or other sources.

Response: Georgia agrees and has added a provision to the demonstration project concept to this effect.

Comment: Certain comments asked that Georgia clarify the case management benefit under the demonstration project.

Response: Georgia has added to the demonstration project proposal specific requirements associated with the demonstration project's case management benefit.

SECTION SIX AT A GLANCE: ANTICIPATED BENEFITS

- ***Overwhelming evidence demonstrates that Georgia's demonstration project will:***
  - ***Increase rates of recommended antiretroviral therapeutic regimens among persons for whom such treatment is medically appropriate;***
  - ***Enhance rates of treatment adherence among HIV-infected persons on antiretroviral therapy; and***
  - ***Improve the quality of care provided to low-income persons living with HIV.***
- ***Five years after full enrollment of the target population, Georgia's program will have saved $4.1 million. After 10 years, savings are projected to grow to more than $185 million.***

SECTION SIX: ANTICIPATED BENEFITS OF DEMONSTRATION PROJECT

The State of Georgia submits that its proposed demonstration project will improve health care outcomes for people with HIV without resulting in an increase in federal outlays. Georgia bases its contention on the following grounds:

- Georgia's proposed demonstration project is based on voluminous research data supporting the State's belief in the public health benefits and cost-neutrality of its proposed approach; and
- A rigorous assessment of Georgia's proposal under a carefully developed, scientifically grounded economic model confirms the public health benefits and cost-neutrality of the State's demonstration project.

This section examines each of these grounds for Georgia's requested waiver.

Published Data Supporting Georgia's Demonstration Project

Substantial evidence reveals that Georgia's proposed demonstration project will provide a cost-effective means of improving public health management of the HIV/AIDS epidemic. According to available evidence, the proposed demonstration project will:

- Increase rates of recommended antiretroviral therapeutic regimens among persons for whom such treatment is medically appropriate;
- Enhance rates of treatment adherence among HIV-infected persons on antiretroviral therapy; and
- Improve the quality of care provided to low-income persons living with HIV.

Increasing Rates of HAART Coverage

Prior to the mid-1990s, clinicians typically prescribed a single antiviral agent for the treatment of HIV infection.[31] As substantial research revealed, however, monotherapy had sharply limited efficacy, primarily due to the inability of a single agent to prevent the development of drug resistance. (D'Aquila et al., 1995.)

The approval of the first protease inhibitor in 1996, followed by emergence of non-nucleoside reverse transcriptase inhibitors, enabled HIV clinicians for the first time to prescribe a combination of multiple classes of antiretroviral compounds (i.e., HAART). A considerable and growing body of data documents the effectiveness of HAART in slowing the progression of HIV disease, when compared with single or dual therapy. (Miller et al., 1999; Pialoux et al., 1998; Havlir et al., 1998; Hammer et al., 1997; Gulick et al., 1997; copies of studies documenting the effectiveness of HAART are attached as Appendix L). HAART also facilitates considerable reconstitution of the patient's immune system. (Powderly et al., 1998.)

In addition to promoting the health, longevity, and quality of life of people living with HIV, widespread use of HAART also has important implications for the cost of HIV care. According to numerous studies, the cost of HIV care increases substantially as the disease progresses (as principally measured by CD4 count). (Bozzette et al., 1998; Moore & Chaisson, 1997[32]; Petrou et al., 1996[33]; Moore & Bartlett, 1996[34]; studies documenting the cost of HIV care according to disease

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[31] Some physicians prescribed two antivirals from the same class of drugs (i.e., nucleoside reverse transcriptase inhibitors such as AZT or ddI).

[32] Analysis of Maryland Medicaid expenses for HIV care between 1992 and 1995 found mean monthly payments of $2,436 for patients with fewer than 50 CD4, compared to $1,015 for patients with more than 500 CD4.

[33] Researchers estimated annual care costs in England and Wales between 1992 and 1997 to be $24,123 for a person with frank AIDS, compared to $13,961 for a patient with symptomatic HIV infection and $7,134 for asymptomatic disease

[34] According to these leading pharmacoeconomists: "For patients with a CD4+ count between 200 and 500 cells/cubic mm, the average monthly costs are $US430 (1992 dollars) for a person without an AIDS-defining illness. For patients with a CD4+ count of less than 200 . . ., the average monthly costs are $US990 (1992 dollars) for a person without an

stage are attached as Appendix M.) This increase in costs stems from a variety of factors associated with more advanced stages of HIV disease, including more frequent hospitalization, hospitalization of longer duration, the need for more intensive medical services (including in many cases long-term care), increased need for palliative care and pain management, and more frequent use of costly medications to treat severe opportunistic illnesses.

By slowing disease progression and facilitating partial recovery of the body's immune system, HAART significantly delays (and potentially prevents) the substantial outlays associated with care for advanced HIV disease. Numerous studies have correlated HAART with dramatic reductions in rates of HIV-related hospitalization. (Keiser et al., 1999[35]; Mouton et al., 1997[36]; Torres & Barr, 1997.[37]) HAART not only helps reduce the frequency of hospitalization, but it shortens the average length of stay; whereas HIV-infected Medicaid recipients in Georgia overall average *30.47 days* per hospital visit, Medicaid patients on antiviral therapy have an average length of stay of *10.95 days*. Although HAART requires an increase in outlays for pharmaceutical products, studies have determined that these increases are more than offset by reductions in hospitalization and the

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AIDS-defining illness. Persons with AIDS have average monthly costs of $US1890, increasing to $US4000 monthly in the 6 months before death."

[35] Analyzing patient data from the Dallas Veterans Affairs Medical Center, Keiser and his colleagues found that protease inhibitor therapy was associated with a decrease in hospital days and overall patient costs.

[36] Data from 10 HIV care centers in France found that centers that moved quickly to prescribe HAART experienced a 41% drop in hospital days and an overall reduction in health care costs, while late-prescribing centers had only a 22% drop in hospital days and an overall increase in medical outlays.

[37] At a leading, hospital-based HIV/AIDS clinic in lower Manhattan, a change in the standard of care (1995-1996) from monotherapy to HAART was associated with a 24% decline in the number of HIV-related inpatient hospital days and a 16% drop in average length of stay.

financial benefits of long-term improvement in patients' health. (Cook et al., 1999[38]; Anis et al., 1998.[39]) (Studies documenting the cost-effectiveness of HAART are attached as Appendix N.)

Georgia's proposed demonstration project will increase use of HAART by eliminating barriers to health care access. As Section IV explained, as many as one in two Georgians diagnosed with HIV have no health insurance. According to the HCSUS study, lack of insurance is strongly associated with diminished access to antiretroviral therapy and with poorer health care outcomes. (Shapiro et al., 1999, Appendix F.) By providing low-income patients with accessible means to obtain a comprehensive continuum of HIV care, the proposed demonstration project will increase utilization of HAART among patients who are eligible to receive it.

The demonstration project will promote usage of HAART among eligible patients through the following means:

- Patients who currently fail to access care due to economic and other barriers will be drawn to the care system when such barriers are eliminated;
- The transition from a care system primarily underwritten by categorical grants to one reliant on a Medicaid-based system (in which reimbursement expands to meet expanding caseload and patient needs) will give providers powerful financial incentives to undertake more innovative and aggressive outreach and case-finding activities;
- Whereas certain parts of the State currently have only the most rudimentary HIV care infrastructure, the demonstration project will ensure that each health district will have at least one HIV center of excellence (such that no person is forced to travel more than one hour to receive primary care);
- A statewide public information campaign will alert persons and community groups to the ready availability of HIV medical services; and
- Persons who have yet to be tested due to a belief that they cannot afford care will be encouraged to learn their serostatus and access appropriate medical services.[40]

[38] Economic modeling determined that patients on HAART would have discounted cost that is $5,100 less over five years than patients on AZT/3TC double-combination treatment.

[39] Modeling of data derived from HIV treatment centers in British Columbia led researchers to conclude that reductions in hospitalization due to HAART would more than offset the costs of the drugs.

Enhancing Treatment Adherence

Although HAART has revolutionized HIV treatment, the regimen is not easy to follow. HAART requires patients to take multiple pills each day – often at complicated time intervals and sometimes with dietary restrictions. Careful adherence to the prescribed regimen – upwards of 95% adherence – is required in order for the regimen to produce the intended, long-term benefits. According to a recent study from a Veterans Affairs medical center, adherence of less than 80% results in a treatment failure rate of 80%. (Paterson et al., 2000, attached as Appendix O.)

The drugs that comprise the HAART regimens are toxic and cause often-severe side effects in many patients. In addition, many persons living with HIV confront severe stresses of poverty, homelessness and co-morbidities, complicating patients' ability to take the drugs as prescribed. (Webster & Barr, 1999.) In particular, mental illness (Paterson et al., 2000; Mehta et al., 1997) and drug and alcohol use (see citations in Webster & Barr, 1999) appear to be associated with non-adherence to HIV therapy. (Significantly, evidence suggests that medical personnel are frequently mistaken about their assessment of patients' adherence or propensity to adhere. (Paterson et al., 2000[41]; Lerner et al., 1998.))

According to two experts who recently surveyed the HIV literature on adherence, "Variables most predictive of better adherence (among HIV-infected patients) were a strong relationship (support, trust, and a feeling of being well cared for) between the patient and the clinician/health care provider and/or system, improved CD4 cell counts and a lowered viral load, and emotional support and continued interaction with peers." (Webster & Barr, 1999.) Experts say "consistency,

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[40] Research indicates that a belief that no care will be available is an important factor for a subset of at-risk persons in their decision to avoid or delay testing. (See Hecht et al., 1998; Bindman et al., 1998.)

[41] In the VA medical center studied by Lerner and colleagues, physicians incorrectly predicted adherence in 41% of their patients, while nurses were mistaken 30% of the time.

availability, and competence" characterize the clinical settings where patients are most likely to adhere to HIV therapy. (Altice & Friedland, 1998.) Medical experts recommend use of a team approach, including non-medical staff, to promote adherence through development of individualized treatment plans grounded in the realities of each patient's life. (Altice & Friedland, 1998; Lerner et al., 1998.) (Studies regarding strategies to improve adherence to HIV therapies are attached as Appendix P.)

Improvement in adherence rates would have important medical and economic benefits. Patients who adhere to treatment are more likely to reap the benefits of HAART – e.g., decreased morbidity, improved quality of life, and greater longevity. The health benefits from careful adherence lead to short- and long-term cost savings by reducing rates of hospitalization and delaying (and perhaps in some cases even preventing altogether) the onset of disability associated with advanced HIV disease.

Georgia's proposed demonstration project will improve adherence rates in the following ways:

- HIV care will be provided in HIV Centers of Excellence, where clinicians will oversee care management teams that will carefully monitor and support patient adherence;
- Clinicians at the HIV Centers of Excellence will themselves dispense antiviral medications to their patients, permitting improved monitoring of patients' adherence;
- Because clinicians serving low-income patients will no longer be forced to rely principally on categorical funding streams, financial barriers to providing "consistency and availability" of treatment physicians and other medical personnel will be removed;
- To address documented impediments to adherence, the demonstration project will ensure that mental health and substance abuse services are readily available to enrollees who need them; and
- Aggressive quality assurance measures will monitor and promote efforts by HIV centers of excellence to encourage patient adherence.

Improving Quality of Care

At earlier stages of the epidemic, HIV/AIDS was regarded as a primary care disease suitable for management by a general practitioner. As the complexity and evolution of the HIV standard of care has accelerated, however, it is increasingly apparent that medical outcomes are enhanced when care is managed by a clinician with extensive HIV-related professional experience. (Zuger & Sharp, 1997.)

One study of 403 HIV/AIDS patients in a staff-model health maintenance organization found that risk of death was 43% lower for persons with the most HIV-experienced physicians than for patients with the least experienced doctors. (Kitahata et al., 1996.) Another found substantially higher mortality associated with HIV-related PCP at health care facilities that had treated fewer than three cases. (Bennett et al., 1995.) In addition, researchers found that patients who received their care in clinics with limited HIV experience were substantially more likely to be seen in an emergency room. (Markson et al., 1998.) (Studies documenting the correlation between physicians' experience and improved HIV-related outcomes are attached as Appendix Q.)

There is compelling evidence that many HIV-infected patients in Georgia are receiving care proven to be substandard. Thirty-eight (38) percent – nearly two in five – Georgia Medicaid recipients with HIV received no antiviral therapy whatsoever in FY99, despite the fact that this population is primarily comprised of people who are fully disabled (presumably as a result of their HIV infection). In addition, despite the well-documented superiority of triple-combination therapy over monotherapy, 868 HIV-infected Medicaid recipients last year in Georgia were prescribed an antiviral regimen that did not comport with federal treatment guidelines. (For the general Medicaid population, there is currently no requirement that care be provided at a Center of Excellence.) Likewise, 15% of ADAP enrollees currently receive either no antiviral regimen or one that departs from federal recommendations (usually by prescribing less than three antivirals). Among patients

followed by the Adult Spectrum of Disease Survey who qualify for HAART, 6% are taking no antiviral drugs at all, while 15.7% are on monotherapy or double-combination therapy. These figures support findings of the national HCSUS survey, which concluded that HIV-positive patients in care in the South are far less likely than patients in other regions of the country to receive HAART or PCP prophylaxis.

As numerous studies reveal, patients who receive substandard therapy (such as one- or two-drug regimens) progress to more serious disease at a much faster rate than patients on HAART, incurring greater medical costs much earlier than patients who receive treatments that comply with federal guidelines. Although the many inexperienced providers who care for low-income patients with HIV are undoubtedly well-intentioned, their inability to keep pace with rapidly changing treatment modalities and diagnostic techniques impedes effective medical and public health management of HIV/AIDS.

The demonstration project proposed by the State of Georgia will improve the quality of HIV care in several ways:

- By requiring that enrollees in the demonstration project receive their care at designated HIV Centers of Excellence, the State will ensure that medical services delivered pursuant to the demonstration project are provided or overseen by clinicians with extensive HIV-related experience;
- Aggressive quality assurance measures will ensure the highest possible rates of adherence to federal treatment guidelines; and
- In cooperation with the Southeast AIDS Treatment and Education Center, the State will target extensive training toward clinicians and other staff at the HIV Centers of Excellence.

Economic Modeling

To test the cost-neutrality of the proposed demonstration project, the State of Georgia and the Georgia AIDS Coalition used an economic model developed by the Treatment Access

Expansion Project[42], in collaboration with PricewaterhouseCoopers. (Curricula vitae for the economists involved in the development of this economic model and its application to the Georgia demonstration project are attached as Appendix R.)

As explained below, the economic model compares projected Medicaid costs in the absence of the waiver (the "no-waiver scenario") with projected costs following implementation of the proposed demonstration project (the "waiver scenario"). To make this comparison, the model uses available data sources to determine likely distribution of patients by CD4 status, rates of disease progression, medical costs associated with stage of disease, and impact of HAART and timely medical care on medical costs and HIV-related disease progression.

Standard inputs for the model are derived from HIV Costs and Services Utilization Study (see Shapiro et al., 1999; Bozzette et al., 1998)[43] and from HIV-related cost data from the Maryland Medicaid program. (Gebo et al., 1999, attached as Appendix S.) These standard inputs have been altered for this analysis in two ways:

- To project costs in the no-waiver scenario, standard inputs derived from Maryland Medicaid data have been adjusted to reflect available information on HIV-related Medicaid costs in Georgia; and
- Cost estimates in the waiver scenario have been adjusted to reflect assumptions regarding the demonstration project's impact on treatment adherence and quality of care.

[42] The Treatment Access Expansion Project ("TAEP") is an outgrowth of the coalition of Title II recipients that advocate for additional funding for the components of Title II of the Ryan White CARE Act (including ADAP). TAEP works with leading economists to document the cost-effectiveness of HIV early intervention and advocates for policies to expand access to care among HIV-infected persons.

[43] Not only did the economists who assisted Georgia in projecting the economic impact of its demonstration project avail themselves of published data from the HCSUS survey, but also they were fortunate to obtain the assistance and cooperation of HCSUS researchers, who kindly supplied PricewaterhouseCoopers with substantial additional, non-identifying data derived from the national study. This enabled PricewaterhouseCoopers to devise more sensitive inputs, such as likelihood of progression based on CD4 status and impact of HAART and optimal care management on both cost of care and rate of progression.

Below is a description of the economic model, standard inputs, adjustments to inputs, assumptions on which inputs are based, and the results of the economic analysis undertaken for the Georgia demonstration project. As noted below, this economic model confirms that the five-year cost of the proposed demonstration project is lower than HIV-related costs that Medicaid will incur over five years in the absence of the requested waiver.

Brief Description of Economic Model

The PricewaterhouseCoopers model uses a set of assumptions to estimate costs with and without the proposed waiver. The model has two key components:

- An input component, in which the user (in this case, the State of Georgia) provides inputs for the computer model; and
- An output component that summarizes projected costs under the assumptions derived from the inputs.

The assumptions in the input component of the model, as described below, are sometimes based on national studies or on data from sources in Georgia. In other cases, where little or no data are available, assumptions must be based on professional judgments or educated guesses. This narrative describes in detail the bases for all assumptions used to model the costs for Georgia's proposed demonstration project.

Outputs from the PricewaterhouseCoopers model include:

- A projection of costs in the no-waiver scenario;
- A projection of costs in the waiver scenario; and
- A comparison of the two cost projections to determine whether the proposed waiver is cost-neutral.

As earlier described, Georgia proposes to implement the demonstration project in phases over 3-5 years. The PricewaterhouseCoopers model projects cost for the population as a whole,

such that cost-neutrality may be determined within arbitrary time intervals following full enrollment of the target population.

No-Waiver Scenario

Calculation of HIV-related Medicaid costs without the waiver requires determination of the likely number of persons with HIV who will enroll in Medicaid over the next five years. In addition, medical costs per Medicaid recipient must be projected during this five-year period. (To emphasize the long-term cost-effectiveness of the Georgia model, projections pursuant to this economic model have been carried out over 10 years.) Because HIV-related medical costs tend to increase as HIV disease progresses, costs must be stratified in accordance with the projected distribution of Medicaid recipients by stage of disease.

- ***No-Waiver Scenario – Calculation of Number of HIV-Positive Medicaid Recipients in the Absence of the Waiver***

  --- ***Estimated Population for Demonstration Project***

  Georgia estimates that 6,500 people with HIV will eventually be eligible for the demonstration project. Consistent with the demonstration project described above, the economic model takes into account the phase-in proposed by the State: capped enrollment of 1,000 persons in Phase One, 3,500 in Phase Two, and 6,500 in Phase Three. The no-waiver component of the model projects costs to the Medicaid program for these individuals if the demonstration project were not implemented.

  -- ***Distribution*** *by HAART Status*

  The model stratifies the potential demonstration project population according to receipt of HAART. In the no-waiver scenario, the model assumes that 60% of the eligible population receives no HAART, that 30% will be on "late HAART" (i.e., HAART that is initiated after the patient experiences HIV-related symptoms or a

drop in CD4 count below 200), and that 10% will receive "early HAART" (i.e., HAART that is initiated in a timely manner, in accordance with federal guidelines and prior to an AIDS diagnosis). Three pieces of evidence support the assumed HAART distribution of patients. First, excluding Medicare-eligible ADAP recipients, the State estimates that the number of ADAP recipients currently receiving HAART is roughly equivalent to approximately 40% of those eligible to participate in the waiver. Given the centrality of ADAP in existing safety-net programs, Georgia assumes that waiver-eligible individuals who are not enrolled in ADAP (or 60% of the eligible population) are not currently receiving HAART. Second, the rather large percentages assigned to the no-HAART and late-HAART categories are supported by national data indicating that the typical person with HIV is diagnosed rather late in the course of disease – often in the hospital and usually in response to HIV-related symptoms. (Hecht et al., 1998; Wortley et al., 1995.) Third, HCSUS researchers found that one-half of all persons with diagnosed HIV infection are not in regular care, with somewhat higher percentages in the South. (Bozzette et al., 1998.) Due to the rigorous monitoring requirements associated with HAART, the State assumes that persons who are not in care are not receiving HAART.

-- ***Initial CD4 Count Distribution***

To determine the CD4 distribution of the demonstration project population, the State used the ADAP and ASD data sets as starting points. Especially heavy reliance was placed on ASD as the single most representative data set regarding the medical profile of people with HIV in Georgia. The State assumes, however, that the demonstration project population will include a disproportionately small percentage of persons with late-stage disease, due to the likelihood that substantial numbers of

indigent persons with late-stage disease will already have qualified for Medicaid due to HIV-related disability. An accurate medical profile of the population potentially eligible for the demonstration project will require an upward adjustment of the ASD percentages of persons at an earlier stage of infection and a downward adjustment of the estimates of persons with more advanced disease. Accordingly, the State assumes that 30% of the eligible population has CD4 counts higher than 500, that 45% have between 350-500 CD4, that 15% have between 200-350, that 5% have between 50-200, and that 5% have fewer than 50 CD4.

— ***CD4 Transition Probabilities by HAART Status***

HIV disease progression is associated with gradual depletion of the body's supply of CD4 cells. Whether the patient receives HAART, as well as the stage of infection at which HAART is implemented, affects the rate of disease progression (as measured by CD4). Using national data from the HCSUS study supplied by the RAND Corporation, PricewaterhouseCoopers estimated the annual likelihood that a person with HIV would progress to a more advanced stage of HIV disease.[44] These estimates, stratified by HAART status, are as follows:

[44] On occasion, HCSUS data regarding likelihood of progression (as measured by CD4) were not available with the detail required by the PricewaterhouseCoopers model. In such cases, PricewaterhouseCoopers relied on the HCSUS data available to make reasonable inferences regarding rate of transition from one CD4 category to another.

No HAART Group – Beginning and End of Each Year

	End – CD4>500	***End – 351-500***	***End – 201-350***	***End – 50-200***	***End -- <50***	***Left***	***Died***
Beginning CD4>500	51%	19%	13%	6%	6%	0%	5%
Beginning CD4 351-500	4%	51%	19%	13%	6%	0%	7%
Beginning CD4 201-350	3%	3%	51%	19%	13%	0%	12%
Beginning CD4 50-200	4%	4%	4%	51%	19%	0%	18%
Beginning CD4<50	5%	5%	5%	5%	32%	0%	50%

Late HAART Group – Beginning and End of Each Year

	End – CD4>500	***End – 351-500***	***End – 201-350***	***End – 50-200***	***End -- <50***	***Left***	***Died***
Beginning CD4>500	58%	24%	13%	3%	3%	0%	0%
Beginning CD4 351-500	18%	53%	13%	13%	3%	0%	0%
Beginning CD4 201-350	11%	11%	52%	17%	7%	0%	1%
Beginning CD4 50-200	9%	9%	9%	47%	15%	0%	12%
Beginning CD4<50	5%	5%	5%	5%	36%	0%	46%

Early HAART Group – Beginning and End of Each Year

	End – CD4>500	***End – 351-500***	***End – 201-350***	***End – 50-200***	***End -- <50***	***Left***	***Died***
Beginning CD4>500	58%	24%	13%	3%	3%	0%	0%
Beginning CD4 351-500	18%	53%	13%	13%	3%	0%	0%
Beginning CD4 201-350	7%	7%	58%	19%	8%	0%	1%
Beginning CD4 50-200	7%	7%	7%	58%	19	0%	1%
Beginning CD4<50	6%	6%	6%	6%	67%	0%	8%

-- Waiver Replacements by Year

To permit a one-to-one comparison of costs over time with and without the waiver, the model requires that the population remain numerically stable in each separate

cost analysis. Under each scenario, a certain number of people will die as time passes, with the no-waiver scenario having a much higher mortality rate. To maintain the population at a stable number for each annual cost analysis in the two scenarios, it is necessary in each scenario to replace persons who die with individuals possessing characteristics (e.g., CD4 count, HAART status, etc.) similar to the initial enrollees. The no-waiver figures are also adjusted to reflect new enrollees in the waiver scenario. Using HCSUS data supplied by RAND, PricewaterhouseCoopers projected the number of deaths in both the no-waiver and waiver scenarios, in order to facilitate economic modeling over time for each scenario.[45]

-- ***Medicaid Phase-In***

No data exist – either in Georgia or nationally – regarding the annual rate at which people with HIV are likely to enroll in Medicaid. To project costs to the Medicaid program in the absence of the waiver, however, it is necessary to estimate the rate by which the eligible population would come into the program under current circumstances. The State assumes that 100% of the eligible population would enroll in Medicaid by Year 7 were the demonstration project not implemented. (In other words, 18% of the population would enroll in Medicaid annually in the no-waiver scenario). This assumption is based on available information on the rate of HIV disease progression; on the fact that the demonstration project population is, by definition, poor or near-poor, and therefore highly likely ultimately to look to Medicaid for health coverage; and on the fact that many HIV-infected individuals are

[45] The no-waiver and waiver populations are not necessarily equal in size. The waiver population, on one hand, will be maintained at a stable 6,500; in other words, people who die or drop out will be replaced, presumably with persons on the waiting list. The no-waiver population, by contrast, will, over time, become somewhat smaller. While each scenario tracks the same group of individuals, persons will live longer under the waiver. As people in the no-waiver scenario die at a faster pace, the cohort will diminish in size.

diagnosed shortly before experiencing HIV-related disability, which triggers Medicaid eligibility.

-- ***Medicaid Turnover***

Due to the disabling nature of HIV disease, it is assumed that no individuals in the potentially eligible population, would, in the absence of the waiver, leave the Medicaid program after enrolling.

-- ***Number in Eligible Population by CD4 by Year***

Based on the above-described inputs provided by Georgia, PricewaterhouseCoopers projected the CD4 distribution of the eligible population for the following 10 years if the demonstration project were not implemented.

- ***No-Waiver Scenario – Cost by CD4 by Year***

-- ***HAART Costs by CD4***

Because a key criterion for initiation of HAART is the patient's CD4 count, HAART-related costs to the Medicaid program over the next 10 years would (in the absence of the demonstration project) vary depending on the distribution of patients by CD4 status. Applying HIV-related cost data from the Maryland Medicaid program to the CD4 distribution, PricewaterhouseCoopers estimates annual HAART-related costs to the Medicaid program in the no-waiver scenario, as follows:

No HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$1,115
CD4 351-500	$2,323
CD4 201-350	$3,438
CD4 50-200	$4,438
CD4<50 or AIDS/OI	$5,665

Late HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$3,602
CD4 351-500	$4,562
CD4 201-350	$5,043
CD4 50-200	$5,576
CD4 <50 or AIDS/OI	$6,018

Early HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$4,408
CD4 351-500	$6,011
CD4 201-300	$6,813
CD4 50-200	$7,374
CD4 <50 or AIDS/OI	$8,015

-- *Non-HAART Costs by CD4*

Non-HAART costs (i.e., non-HAART drugs, hospitalization, community care, etc.) also vary by disease stage. (Gebo et al., 1999.)[46] Applying HIV-related cost data from the Maryland Medicaid program to the CD4 distribution and anticipated rate of disease progression of the demonstration population, PricewaterhouseCoopers developed standard inputs for non-HAART medical costs to the Medicaid program in the absence of a waiver, as follows –

[46] In the Maryland Medicaid program, for example, monthly non-antiretroviral medical costs for HIV-infected beneficiaries with fewer than 50 CD4 are more than twice as high as persons with a CD4 count between 50-500. Non-antiretroviral pharmaceutical costs for persons with fewer than 50 CD4 are nearly eight times greater than for persons between 200-500 CD4, and inpatient costs are more than twice as high. (Gebo et al., 1999.)

No HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$5,506
CD4 351-500	$8,259
CD4 201-350	$11,012
CD4 50-200	$16,518
CD4 <50 or AIDS/OI	$21,631

Late HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$4,927
CD4 351-500	$7,268
CD4 201-350	$8,212
CD4 50-200	$9,643
CD4 <50 or AIDS/OI	$15,849

Early HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$1,894
CD4 351-500	$3,410
CD4 201-350	$5,683
CD4 50-200	$7,820
CD4 <50 or AIDS	$10,067

The standard inputs for non-waiver medical costs in the no-HAART and late HAART groups were adjusted upwards by a 20% multiplier to reflect the fact that non-HAART medical costs for late-stage HIV disease appear to be much higher in the Georgia Medicaid program than in Maryland. Average length of hospital stay for a Medicaid recipient in Georgia with HIV exceeds 30 days – substantially longer than national norms.[47] Average annual hospital cost per HIV-positive Medicaid recipient in Georgia is $18,733.90 – a figure that substantially exceeds (by more than 20%)

[47] Although Georgia does not track Medicaid utilization by CD4 status, available evidence outside Georgia leads the State to conclude that especially long hospitalizations are primarily concentrated among persons with advanced HIV disease. In the Maryland Medicaid program, for example, monthly non-antiretroviral medical costs for HIV-infected beneficiaries with fewer than 50 CD4 are more than twice as high as persons with a CD4 count between 50-500. Non-antiretroviral pharmaceutical costs for persons with fewer than 50 CD4 are nearly eight times greater than for persons between 200-500 CD4, and inpatient costs are more than twice as high. (Gebo et al., 1999.)

annual non-HAART costs ($15, 576) of the very sickest HIV-positive Medicaid recipients in Maryland (i.e., those with fewer than 50 CD4). The conservative upward adjustment to the Maryland data resulted in model inputs for Georgia's non-HAART medical costs as follows –

No HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$6,930
CD4 351-500	$11,081
CD4 201-350	$16,184
CD4 50-200	$32,800
CD4 <50 or AIDS/OI	$43,655

Late HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$6,201
CD4 351-500	$9,751
CD4 201-350	$12,070
CD4 50-200	$19,148
CD4 <50 or AIDS/OI	$31,986

Early HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$1,894
CD4 301-500	$3,410
CD4 201-350	$5,683
CD4 50-200	$7,820
CD4 <50 or AIDS/OI	$10,067

Because of the documented acceleration in non-drug-related medical costs as HIV disease progresses, the multiplier (which takes account of such cost factors) results in cost increases substantially greater than 20% for persons with late-stage disease.

-- ***Total Costs by CD4***

PricewaterhouseCoopers combined the above-noted calculations for HAART and non-HAART costs in the non-waiver scenario to generate *total* medical costs by CD4.

- ***No-Waiver Scenario – Gross Cost to Medicaid***

On the basis of the previously described inputs provided by Georgia, PricewaterhouseCoopers estimated annual HIV-related costs and the number of HIV-positive individuals that Medicaid would serve over the next 10 years in the absence of the waiver.

	Y1	***Y2***	***Y3***	***Y4***	***Y5***	***Y6***	***Y7***	***Y8***	***Y9***	***Y10***
Total Costs (millions)	$0.0	$17.3	$33.9	$46.7	$55.2	$60.3	$63.0	$61.0	$53.4	$46.9
Non-Drug	$0.0	$13.8	$27.1	$37.2	$43.8	$47.5	$49.1	$47.0	$40.7	$35.4
Drug	$0.0	$3.6	$6.8	$9.4	$11.4	$12.8	$13.9	$14.0	$12.7	$11.6
Number of People	0	910	1,636	2,176	2,559	2,821	2,995	2,960	2,648	2,383
Costs Per Person	$0	$2,854	$6,222	$9,651	$12,946	$16,041	$18,931	$20,606	$20,152	$19,700
Non-Drug	$0	$2,267	$4,972	$7,701	$10,272	$12,626	$14,758	$15,892	$15,365	$14,843
Drug	$0	$588	$1,251	$1,951	$2,674	$3,414	$4,173	$4,714	$4,787	$4,857

In the absence of the waiver, total costs to the Medicaid program over five years for the demonstration population will be as follows –

Costs to Medicaid (in millions)	$153.1
Non-Drug	$121.9
Drug	$31.2
Costs per person	$5,646
Non-Drug	$4,495
Drug	$1,151

Over *ten* years, costs to Medicaid in the no-waiver scenario are as follows –

Costs to Medicaid (in millions)	$437.8

Non-Drug	$341.5
Drug	$96.2
Costs per person	$10,373
Non-Drug	$8,095
Drug	$2,278

Waiver Scenario

Based on inputs provided by Georgia, PricewaterhouseCoopers performed a similar analysis with respect to the demonstration project proposed here.

- ***Waiver Scenario – Calculation by CD4 Status of Number of People to be Served by Demonstration Project***

  -- ***Estimated Population for Demonstration Project***

  As noted above, the economic model estimates that 6,500 persons will eventually participate in the demonstration project and that the project will be phased in over 3-5 years, as indicated.

  -- ***Distribution by HAART Status***

  A key goal of the demonstration project is to ensure that all persons who qualify for HAART receive such therapy in a timely manner. Rigorous quality assurance measures, closely supervised clinic-based case management activities, and close coordination between the demonstration project and the ADAP program are included in the waiver proposal to further this objective. In addition, the economics of caring for uninsured persons with HIV, which currently provide little or no incentive for safety-net providers to undertake aggressive strategies to bring persons into care at an earlier disease stage, will under the demonstration project be realigned to encourage providers to do so. Unfortunately, in light of evidence that many people with HIV infection are tested rather late in the course of disease, it is prudent to assume that, notwithstanding an aggressive State program to encourage early

identification and treatment of HIV infection, a percentage of enrollees in the demonstration project will initiate HAART only after they are diagnosed with AIDS. For purposes of the economic model, the State assumes that 85% of demonstration project enrollees will receive "early HAART," while 15% will receive "late HAART."

-- ***Initial CD4 Count Distribution***

Anticipated distribution by CD4 count of the eligible population is described above in the no-waiver scenario.

-- ***CD4 Transition Probabilities by HAART Status***

Under the demonstration project, access to comprehensive, aggressively managed HIV care will improve medical outcomes and thereby alter the CD4 transition probabilities of the demonstration population. On the basis of available evidence regarding the impact of antiretroviral therapy and access to care on disease progression, PricewaterhouseCoopers devised the following matrix to reflect the annual likelihood that a person enrolled in the demonstration project will progress to another CD4 category:

Late HAART Group – Beginning and End of Each Year

	End – CD4>500	***End – 351-500***	***End – 201-350***	***End – 50-200***	***End -- <50***	***Left***	***Died***
Beginning CD4>500	64%	26%	10%	0%	0%	0%	0%
Beginning CD4 351-500	20%	58%	14%	8%	0%	0%	0%
Beginning CD4 201-350	12%	12%	58%	18%	0%	0%	3%
Beginning CD4 50-200	10%	10%	10%	51%	17%	0%	3%
Beginning CD4<50	5%	5%	5%	5%	39%	0%	41%

Early HAART Group – Beginning and End of Each Year

	End – CD4>500	***End – 351-500***	***End – 201-350***	***End – 50-200***	***End -- <50***	***Left***	***Died***
Beginning CD4>500	64%	26%	10%	0%	0%	0%	0%
Beginning CD4 351-500	20%	58%	14%	8%	0%	0%	0%
Beginning CD4 201-350	8%	8%	63%	20%	0%	0%	3%
Beginning CD4 50-200	8%	8%	8%	56%	19%	0%	0%
Beginning CD4<50	7%	7%	7%	6%	73%	0%	0%

-- ***Number in Waiver by CD4 by Year***

Based on the above-noted inputs provided by Georgia, PricewaterhouseCoopers projected the annual CD4 distribution of waiver participants.

- ***Waiver Scenario – Cost of Demonstration Project by CD4 by Year***

-- ***HAART Costs by CD4***

In a unique collaboration between the Medicaid and ADAP programs, antiviral drugs are carved out of the demonstration project's benefit package. Because ADAP will cover all antiviral drugs for enrollees in the demonstration project, the project will incur no HAART costs.

-- ***Non-HAART Costs by CD4***

The especially high non-HAART medical costs in Georgia's Medicaid program, which necessitated an upward adjustment in non-HAART costs in the no-waiver scenario, stem from extremely long hospital stays by some Medicaid recipients.[48] It is reasonable to assume that the large majority of HIV-infected patients who stay in the hospital for more than a month are in an advanced stage of disease. Because such persons would satisfy SSI disability criteria and therefore qualify for Medicaid, such especially high hospitalization costs would generally not be borne by the demonstration project but rather by the Medicaid program, dispensing with the need for an upward adjustment from the Maryland cost data in the waiver scenario. Moreover, the Georgia Medicaid data indicate that properly managed patients with HIV have hospital stays more typical for the nation as a whole; as rigorous quality assurance mechanisms will help ensure that all enrollees in the demonstration project who qualify for HAART receive it, there is additional reason to forego an upward adjustment from the Medicaid data in the waiver scenario. The State has, however, adjusted such data downward by 20% from baseline to reflect the anticipated salutary economic impact of the demonstration project. Specifically, Georgia anticipates that the demonstration project will significantly improve adherence rates and reduce the frequency with which inappropriate regimens are prescribed, which in turn will enhance medical outcomes and thereby reduce hospitalization costs. The assumptions leading to a downward adjustment to cost inputs in all categories of the

[48] Whereas average length of hospital stay for HIV-positive Medicaid recipients on antiviral therapy is less than 11 days, the average length of stay for *all* HIV-infected recipients exceeds 30 days. This disparity suggests that some HIV-infected Medicaid recipients are spending extraordinarily long periods in the hospital. According to State Medicaid officials, certain HIV-infected Medicaid recipients have hospital stays longer than 100 days.

waiver scenario are justified by the demonstration project's proposed implementation of a rigorous clinic-based case management system, initiation of comprehensive quality assurance measures, and coverage for mental health and substance abuse services. With this downward adjustment from the Maryland data, the model incorporates the following non-HAART cost inputs for the waiver scenario –

No HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$4,405
CD4 351-500	$6,607
CD4 201-350	$8,810
CD4 50-200	$13,214
CD4 <50 or AIDS/OI	$17,305

Late HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$3,942
CD4 351-500	$5,814
CD4 201-350	$6,570
CD4 50-200	$7,714
CD4 <50 or AIDS/OI	$12,679

Early HAART Group –

CD4 Levels	*Annual Cost*
CD4 >500	$1,515
CD4 301-500	$2,728
CD4 201-350	$4,546
CD4 50-200	$6,256
CD4 <50 or AIDS/OI	$8,054

-- *Total Costs by CD4*

Because the demonstration project includes no HAART costs, total costs by CD4 by year are identical to non-HAART costs by CD4 by year, as set forth immediately above.

- ***Waiver Scenario – Gross Cost of Waiver***

  On the basis of the above-noted cost inputs, Georgia projects that the gross costs of the waiver are as follows –

	Y1	***Y2***	***Y3***	***Y4***	***Y5***	***Y6***	***Y7***	***Y8***	***Y9***	***Y10***
Total Costs (millions)	$3.5	$12.4	$13.0	$24.0	$24.9	$25.7	$26.3	$26.8	$27.1	$27.4
Non-Drug	$3.5	$12.4	$13.0	$24.0	$24.9	$25.7	$26.3	$26.8	$26,1	$27.4
Drug	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Number of People	1,000	3.500	3.500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
Costs Per Person	$3,488	$3,540	$3,715	$3,690	$3,837	$3,958	$4,052	$4,123	$4,176	$4,214
Non-Drug	$3,488	$3,540	$3,715	$3,690	$3,837	$3,958	$4,052	$4,123	$4,176	$4,214
Drug	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Using inputs provided by Georgia, PricewaterhouseCoopers projects total costs of the demonstration project as follows –

Costs to Medicaid (in millions)	$77.8
Non-Drug	$77.8
Drug	$0
Costs per person	$3,705
Non-Drug	$3,705
Drug	$0

Over *ten* years, costs of the demonstration project are as follows –

Costs to Medicaid (in millions)	$211.2
Non-Drug	$211.2
Drug	$0
Costs per person	$3,948
Non-Drug	$3,948
Drug	$0

Savings Associated with the Demonstration Project

Comparison of gross five-year costs to the Medicaid program in the absence of a waiver with gross five-year costs of the demonstration project reveals that the demonstration project would result in a $4.1 million *reduction* in overall spending on this population of low-income individuals living with HIV. Through 10 years, cost savings from the demonstration project are projected to grow to $185.6 million. After 10 years, the gross cost of the demonstration project would be *88%* less than what Medicaid would spend in the absence of a waiver.

It should be emphasized that these estimates of cost savings are conservative. The extraordinarily high hospitalization expenses recorded for HIV-infected Medicaid patients who are not on HAART suggest that non-HAART medical costs in the no-waiver scenario should have an upward adjustment multiplier substantially in excess of 20%. Similarly, Georgia strongly believes that its clinic-based case management, quality assurance measures, and close monitoring of service utilization under the demonstration project will enable the State to reap savings substantially in excess of the 20% used in the waiver scenario as a downward cost multiplier.

Additional Savings from the Demonstration Project

This model looks exclusively at Medicaid expenditures over the next five and ten years. Yet, there are numerous additional ways in which the proposed demonstration project would save taxpayers money.

- ***Enhanced Productivity***

  Georgia believes that many people who will be served by the demonstration project are presently employed. Given their income status, most are likely employed by small companies or in periodic work. Such workers are the least likely to have private health insurance. By bringing workers into a comprehensive system of care, the demonstration project will help prevent or delay progression to disability, which will in turn help such individuals stay in the workforce and continue paying taxes. (See Rizzo et al., 1999, attached as Appendix T.)

- ***Reduced Outlays for SSI***

  By delaying onset of disability, the demonstration project will push HIV-related Social Security outlays further into the future, yielding present economic savings.

- ***Reduced Outlays for Medicare***

  Delaying onset of disability and Medicaid eligibility will, in turn, push HIV-related Medicare outlays further into the future, yielding present economic savings.

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APPENDICES

(A) Summary of Calendar Year 1999 Data for Georgia AIDS Drug Assistance Program

(B) FY1999 Data from Georgia Medicaid Program – Persons with Primary or Secondary Diagnosis of HIV

(C) Unduplicated 1999 Data Summary – Ryan White Titles I & II in Georgia

(D) Data Summary – Grady Infectious Disease Clinic

(E) Data Summary – Adult Spectrum of Disease Survey – AIDS Research Consortium of Atlanta

(F) Data from HIV Care and Services Utilization Study (HCSUS)

(G) Georgia Community Service Boards

(H) Protocol for Georgia SOURCE Program

(I) Georgia Health Districts

(J) Per Unit Medicaid Rates for Mental Health and Substance Abuse Services

(K) Revised Concept Paper, Georgia Medicaid Demonstration Project, May 2000

(L) Studies Documenting Effectiveness of HAART

(M) Studies Documenting Cost of HIV Care by Disease Stage

(N) Studies Documenting Cost-Effectiveness of HAART

(O) Veterans Affairs Study on HIV Treatment Adherence

(P) Studies Regarding Strategies to Improve Adherence

(Q) Studies Documenting Improvement in Health Outcomes of Patients Under Care of HIV-Experienced Physicians

(R) Curricula Vitae – Economists Involved in Economic Modeling of the Impact of Proposed Demonstration Project

(S) Maryland Medicaid Data

(T) Studies Regarding Employment Impact of Timely HAART